DOCUMENT RESUME

ED 351 957 HE 026 020

AUTHOR Byce, Chuck; Schmitt, Carl M.
TITLE Students at Less-Than-4-Year Institutions. National Postsecondary Student Aid Study. Statistical Analysis Report. Contractor Report.
INSTITUTION MPR Associates, Berkeley, CA.
SPONS AGENCY National Center for Education Statistics (ED), Washington, DC.
REPORT NO ISBN-0-16-038229-7; NCES-92-206
PUB DATE Nov 92
NOTE 70p.
AVAILABLE FROM U.S. Government Printing Office, Superintendent of Documents, Mail Stop: SSOP, Washington, DC 20402-9328.
PUB TYPE Reports - Descriptive (141) -- Statistical Data (110)

EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS *Community Colleges; Comparative Analysis; Degrees (Academic); Enrollment; Fees; National Surveys; Postsecondary Education; Private Colleges; Public Colleges; Socioeconomic Status; *Student Characteristics; Student Costs; *Student Financial Aid; Student Needs; Tables (Data); Tuition; *Two Year Colleges

ABSTRACT

This report examines the characteristics of less-than-4-year institutions and the students who attend them. Data are presented on the number and size of less-than-4-year institutions, their educational offerings, types of degrees awarded, and on student demographic and socioeconomic characteristics, attendance costs, and financial aid. Following an introductory chapter, Chapter 2 provides a description of enrollment and program offerings at less-than-4-year institutions using data from the Integrated Postsecondary Data System survey. Chapters 3, 4, and 5 use National Postsecondary Student Aid Study (1987) data to describe students enrolled in less-than-4-year public, private not-for-profit, and private for-profit institutions. The sixth chapter compares students attending the different types of less-than-4-year institutions with those attending 4-year institutions. The seventh and final chapter summarizes the findings of this study. Student characteristics examined are divided into four groups: demographic and socioeconomic characteristics, including sex, age, marital status, dependent student's family income, and independent student's income; educational goals, including ultimate degree objective and field of study; student expenses, including the average amount paid for tuition and fees, housing, transportation, and miscellaneous; and sources and average amounts of financial support. Appendices include study technical notes and lists of selected undergraduate characteristics. (GLR)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

HE026020

BEST COPY AVAILABLE

NATIONAL CENTER FOR EDUCATION STATISTICS

Statistical Analysis Report November 1992

National Postsecondary Student Aid Study

Students at Less-Than-4-Year Institutions

Contractor Report

Chuck Byce
MPR Associates, Inc.

Carl M. Schmitt
Project Officer
National Center for Education Statistics

U.S. Department of Education
Office of Educational Research and Improvement NCES 92-206

U.S. Department of Education
Lamar Alexander
Secretary

Office of Educational Research and Improvement
Diane Ravitch
Assistant Secretary

National Center for Education Statistics
Emerson J. Elliott
Commissioner

National Center for Education Statistics

"The purpose of the Center shall be to collect, and analyze, and disseminate statistics and other data related to education in the United States and in other nations."—Section 406(b) of the General Education Provisions Act, as amended (20 U.S.C. 1221e–1).

November 1992

Contact:
Carl M. Schmitt
(202) 219–1642

For sale by the U.S. Government Printing Office
Superintendent of Documents, Mail Stop: SSOP, Washington, DC 20402-9328
ISBN 0-16-038229-7

Foreword

This report examines the characteristics of less-than-4-year institutions and the students who attend them. Data are presented on the number and size of less-than-4-year institutions, their educational offerings, types of degrees awarded, and on student demographic and socioeconomic characteristics, attendance costs, and financial aid. This report is intended to provide a broader understanding of the students who attend less-than-4-year institutions, rather than providing the definitive profile of this group of students.

Most of the data presented in this report were derived from the 1986–87 National Postsecondary Student Aid Study (NPSAS:87), a large-scale survey that contains extensive information on the educational, demographic, and financial aspects of postsecondary students and their parents. The survey is representative of both graduate and undergraduate students in all sectors of postsecondary institutions. Given the complexity of the financial aid award process and the need to have a greater understanding of the way in which students finance their education, the financial aid information collected in this survey is of particular importance.

Information about obtaining the NPSAS data file is available from the U.S. Department of Education, Office of Educational Research and Improvement, Information Technology Branch, 555 New Jersey Avenue, NW, Room 215, Capitol Place Building, Washington, DC 20208.

Paul D. Planchon, Associate Commissioner
National Center for Education Statistics
Office of Educational Research and Improvement

C. Dennis Carroll, Chief
Longitudinal Studies Branch
National Center for Education Statistics
Office of Educational Research and Improvement

Acknowledgments

The author wishes to acknowledge the valuable contributions of John Lee (JBL Associates), Mark Schwartz (ED/OVAE), Roz Korb, Sal Corralo, Jim Houser, and Doug Wright (NCES) in reviewing the report. Thanks also to all those persons who contributed to the production of the report. Keiri Custodio, Ramona McCowan, and Sharlene Mulder produced and formatted the tables. Andrea Livingston and Brett Threlkeld edited the text and graphics. Special thanks go to Dennis Carroll and Carl M. Schmitt of the Longitudinal Studies Branch for their comments and suggestions throughout the life of this task.

Highlights

This report describes the characteristics of less-than-4-year postsecondary institutions and the students who attend them. The specific types of less-than-4-year institutions examined are public, private not-for-profit, and private for-profit institutions. Some of the more important findings are as follows:

- Less-than-4-year institutions constituted a majority of all postsecondary institutions (9,576) and accounted for about one-third of total postsecondary enrollment (12,282).
- Public less-than-4-year institutions represented only about 17 percent of less-than-4-year institutions, but accounted for about 80 percent of the student enrollment at this institutional level.
- Private for-profit institutions were the most numerous (about 70 percent) of all less-than-4-year institutions, but they enrolled only about 14 percent of less-than-4-year students.
- In each type of less-than-4-year institution (public, private not-for-profit, and private for-profit), a majority of the students were female (57 percent, 63 percent, and 67 percent, respectively).
- About three-quarters of the students attending either public or private not-for-profit less-than-4-year institutions and about two-thirds of the students at private for-profit less-than-4-year institutions were white.
- Private for-profit institutions enrolled a greater proportion of black students (about 21 percent) and a greater proportion of low-income students (30 percent of dependent students had family incomes less than $12,000) than did the other two types of less-than-4-year institutions: among students enrolled in public less-than-4-year institutions, 9 percent were black and 16 percent of dependent students' family income was less than $12,000; similarly, in private not-for-profit less-than-4-year institutions, 9 percent were black and 18 percent of dependent students had family incomes below $12,000.
- Students in public less-than-4-year institutions were more likely to be older, married, and enrolled part time than were students in the private sector: 34 percent of students in public institutions were age 30 or older compared with 20 percent in private not-for-profit institutions; 35 percent of students in public institutions were married, compared with 22 percent and 27 percent, respectively, in private not-for-profit and private for-profit institutions; 63 percent of students in public institutions attended part-time compared with 30 percent and 16 percent, respectively, of students in private not-for-profit and private for-profit institutions.
- The average amount of tuition and fees paid by students at public less-than-4-year institutions was low (about $333) relative to other types of less-than-4-year institutions ($2,440 and $3,193, respectively, for private not-for-profit and private for-profit institutions).

- About one-third of the students attending public less-than-4-year institutions received some kind of financial aid, compared with 69 percent of less-than-4-year students at private not-for-profit institutions and 84 percent at private for-profit institutions.
- The average amount of financial aid students received was $1,620 in public less-than-4-year institutions, whereas in private not-for-profit and in private for-profit less-than-4-year institutions, they received $3,170 and $3,652, respectively.

Contents

Foreword iii

Acknowledgments iv

Highlights v

List of Tables viii

List of Figures xi

Chapter 1: Introduction 1
- Background 1
- Purpose of This Report 2
- Sources of Data 2
- Organization of This Report 3

Chapter 2: Characteristics of Less-than-4-Year Institutions 4
- Number of Less-than-4-Year Institutions and Size of Enrollment 4
- Educational Offerings 5
- Degrees Awarded 6

Chapter 3: Students in Public Less-than-4-Year Institutions 7
- Introduction 7
- Demographic and Socioeconomic Characteristics 7
- Cost of Attendance and Financial Aid 14

Chapter 4: Students at Private Not-for-Profit Less-than-4-Year Institutions 17
- Introduction 17
- Demographic and Socioeconomic Characteristics 17
- Cost of Attendance and Financial Aid 23

Chapter 5: Students at Private for-Profit Less-than-4-Year Institutions 26
- Introduction 26
- Demographic and Socioeconomic Characteristics 26
- Cost of Attendance and Financial Aid 32

Chapter 6: Comparisons Among Students Enrolled in Different Less-than-4-Year Institutions, and Comparisons Between Less-than-4-Year Students and Students Enrolled in 4-Year Institutions 35
- Comparisons Among Students in Different Less-than-4-Year Institutions 35
- Comparison of Students Enrolled in Less-than-4-Year Institutions with Students Enrolled in 4-Year Institutions: Public Sector 37
- Comparison of Students Enrolled in Less-than-4-Year Institutions with Students Enrolled in 4-Year Institutions: Private, Not-for-Profit Sector 40

Chapter 7: Summary 43

Appendix A: Technical Notes 45

Appendix B: Selected Standard Errors 48

Appendix C: Selected Undergraduate Characteristics 50

Appendix D: Weighted Totals 52

List of Tables

Table		Page
2.1	Number and enrollment of less-than-4-year institutions, by control: 1987–88	5
2.2	Percentage of less-than-4-year institutions offering educational programs, by control of institution: 1987–88	6
2.3	Percentage of less-than-4-year institutions awarding degrees, certificates, or licenses in selected areas of study, by control of institution: 1987–88	6
3.1	Percentage of students who were male and female at public less-than-4-year institutions, by race–ethnicity and dependency status: Fall 1986	8
3.2	Percentage of students at public less-than-4-year institutions, by marital status, and by selected student characteristics: Fall 1986	11
3.3a	Percentage distribution of dependent students by annual family income at public less-than-4-year institutions, by attendance status: Fall 1986	12
3.3b	Percentage distribution of independent students by annual student income at public less-than-4-year institutions, by attendance status: Fall 1986	13
3.4	Percentage distribution of students' ultimate educational objective among those at public less-than-4-year institutions, by attendance status: Fall 1986	13
3.5	Average amount of annual expenditures reported by students at public less-than-4-year institutions, by dependency and attendance status: Fall 1986	14
3.6a	Percentage of students at public less-than-4-year institutions receiving various types of financial support, by attendance and dependency status: Fall 1986	15
3.6b	Average amount of financial support received from various sources by students at public less-than-4-year institutions, by attendance and dependency status: Fall 1986	16
4.1	Percentage of male and female students at private not-for-profit less-than-4-year institutions, by race–ethnicity and dependency status: Fall 1986	18
4.2	Percentage of married and single students at private not-for-profit less-than-4-year institutions, by selected student characteristics: Fall 1986	21
4.3a	Percentage of dependent students' annual family income at private not-for-profit less-than-4-year institutions, by attendance status: Fall 1986	22
4.3b	Percentage of independent students at private not-for-profit less-than-4-year institutions, by student income and by attendance status: Fall 1986	22
4.4	Percentage distribution of students' ultimate educational objective at private not-for-profit less-than-4-year institutions, by attendance status: Fall 1986	23

4.5 Average amount of annual expenditures reported by students at private not-for-profit less-than-4-year institutions, by dependency and attendance status: Fall 1986 24

4.6a Percentage of students at private not-for-profit less-than-4-year institutions receiving various types of financial support, by attendance and dependency status: Fall 1986 25

4.6b Average amount of financial support received by students at private not-for-profit less-than-4-year institutions, by attendance and dependency status: Fall 1986 25

5.1 Percentage of males and females at private for-profit less-than-4-year institutions, by race–ethnicity and dependency status: Fall 1986 28

5.2 Percentage of married and single students at private for-profit less-than-4-year institutions, by selected student characteristics: Fall 1986 30

5.3a Percentage distribution of dependent students' annual family income at private for-profit less-than-4-year institutions, by attendance status: Fall 1986 31

5.3b Percentage distribution of independent students' annual income at private for-profit less-than-4-year institutions, by attendance status: Fall 1986 31

5.4 Percentage distribution of students' ultimate educational objective at private for-profit less-than-4-year institutions, by attendance status: Fall 1986 32

5.5 Average amount of annual expenditures reported by students at private for-profit less-than-4-year institutions, by dependency and attendance status: Fall 1986 33

5.6a Percentage of students at private for-profit less-than-4-year institutions receiving various types of financial support, by attendance and dependency status: Fall 1986 34

5.6b Average amount of financial support received by students at private for-profit less-than-4-year institutions, by attendance and dependency status: Fall 1986 34

6.1 Percentage of students at less-than-4-year institutions and at all postsecondary institutions, by selected student characteristics: Fall 1986 36

6.2 Percentage of males and females at public less-than-4-year and public 4-year institutions, by race–ethnicity: Fall 1986 37

6.3 Percentage of students at public less-than-4-year and 4-year institutions, by selected student characteristics: Fall 1986 38

6.4 Percentage of students at public less-than-4-year and 4-year institutions, by dependent family income and independent student income: Fall 1986 39

6.5 Average annual expenditures reported by students at public less-than-4-year and 4-year institutions: Fall 1986 40

6.6 Percentage of males and females at private not-for-profit less-than-4-year and not-for-profit 4-year institutions, by race–ethnicity and dependency status: Fall 1986 40

6.7 Percentage of students at private not-for-profit less-than-4-year and 4-year institutions, by race–ethnicity, age, and marital status: Fall 1986 41

6.8 Percentage of students at private not-for-profit less-than-4-year and 4-year institutions, by dependent student family income and independent student income: Fall 1986 42

6.9 Average annual expenditures of students at private not-for-profit less-than-4-year and 4-year institutions: Fall 1986 42

B.1 Selected standard errors 48

C.1 Percentage distribution of selected undergraduate characteristics 50

D.1 Weighted Ns for row variables 52

List of Figures

Figure		Page
3.1	Percentage of students at public less-than-4-year institutions, by sex: Fall 1986	8
3.2	Percentage of students at public less-than-4-year institutions, by race–ethnicity: Fall 1986	9
3.3	Percentage of students at public less-than-4-year institutions, by age: Fall 1986	10
3.4	Percentage of students at public less-than-4-year institutions, by marital status: Fall 1986	10
4.1	Percentage of students at private not-for-profit less-than-4-year institutions, by sex: Fall 1986	18
4.2	Percentage of students at private not-for-profit less-than-4-year institutions, by race–ethnicity: Fall 1986	19
4.3	Percentage of students at private not-for-profit less-than-4-year institutions, by age: Fall 1986	19
4.4	Percentage of students at private not-for-profit less-than-4-year institutions, by marital status: Fall 1986	20
5.1	Percentage of students at private for-profit less-than-4-year institutions, by sex: Fall 1986	27
5.2	Percentage of students at private for-profit less-than-4-year institutions, by race–ethnicity: Fall 1986	28
5.3	Percentage of students at private for-profit less-than-4-year institutions, by age: Fall 1986	29
5.4	Percentage of students at private for-profit less-than-4-year institutions, by marital status: Fall 1986	30

Chapter 1

Introduction

Background

Less-than-4-year institutions are an important resource for students in American education. Currently, these institutions represent a majority of postsecondary institutions, and account for nearly one-third of all postsecondary enrollment. Their community-based access and affordability have opened up postsecondary education to many groups of students who previously may not have had the opportunity to attend. Thus, the students attending these institutions vary across many characteristics, including their cultural and socioeconomic backgrounds, academic abilities, and educational aspirations.

From their beginnings at the turn of the century to about the 1940s, less-than-4-year institutions were primarily known as junior colleges.[1] At that time, they encompassed such institutions as university branch campuses offering lower division coursework; state junior colleges supported by state funds; district junior colleges, usually organized by a secondary school district; and local colleges.[2] In their early years, junior colleges primarily functioned as 2-year academic programs in which students would complete their lower division collegiate studies and then transfer to 4-year colleges or universities.[3] During the 1950s and 1960s, a distinction was made between *junior college*, a term more often applied to such lower division branches of private universities and to 2-year colleges supported by churches or organized independently, and *community college*, a term generally applied to comprehensive, publicly supported institutions that often served as a cultural center for the particular community they were serving.[4] While vocational programs were offered along with the more traditional collegiate programs during the early years of community colleges, it wasn't until the 1970s that more short-term occupational, vocational, and technical studies reached parity with the collegiate transfer programs.[5] Ever increasing access to community colleges resulted in rapidly increasing enrollment. For example, there are currently community college systems in inner cities, rural districts, prisons, and on military bases. Classes can be taken via closed-circuit television, on Saturdays, and late into the evenings. In addition to academic and occupational programs, remedial and continuing education is offered to those who lack the skills necessary to perform on a collegiate level.[6]

While both public and private not-for-profit less-than-4-year institutions have been in existence for most of this century, private for-profit institutions are among the most recent and numerous of the less-than-4-year institutions. In fact, most of these institutions were established in the 1970s or later for the primary purpose of training individuals for a specific occupation.[7]

---

[1]For a review, see A.M. Cohen and F.B. Brawer, *The American Community College* (San Francisco: Jossey-Bass Publishers, 1982).

[2]Ibid., 5.

[3]R. Woodroof, *The Viability of the Private Junior College* (San Francisco: Jossey-Bass, 1990).

[4]Ibid., 6.

[5]Cohen & Brawer, 17.

[6]D. Parnell, *The Neglected Majority* (Community College Press, 1985).

[7]Accurate numbers of proprietary institutions have been difficult to obtain for the period before the mid-1980s because they were originally included as part of the adult noncollegiate sector of institutions.

The areas in which these private for-profit institutions offer training and the length of the programs, however, vary widely, ranging from a few months to several years. Such programs might include cosmetology, dental hygiene, industrial trades, business support, and so on.

Less-than-4-year institutions are a diverse group, both in the types of students enrolled and the programs offered. These differences are especially apparent in relation to the control of the institution—that is, whether they are public or private; and further, for private institutions, whether or not they operate for a profit.[8] Thus, this report examines the institutional and student characteristics of less-than-4-year institutions within each particular sector, and then compares students across public and private sectors.

Purpose of This Report

The purpose of this report is threefold. First, it describes the characteristics of less-than-4-year institutions, specifically in relation to enrollment and educational offerings. Second, it describes the students who attend these institutions. Finally, it compares students who attend different types of less-than-4-year institutions, and compares students attending less-than-4-year institutions with those enrolled in 4-year institutions.

Sources of Data

The statistics presented in this report are primarily drawn from the 1986–87 National Postsecondary Student Aid Study (NPSAS:87), a cross-sectional survey of a nationally representative sample of individuals enrolled in postsecondary education in the fall of 1986. A three-stage stratified probability sampling design was used to select the sample of students.[9] More than 43,000 students were included, representing all students enrolled in postsecondary institutions in the fall of 1986. In addition to the students, NPSAS surveyed the institutions they attended and a sample of their parents. The students reported on their demographic characteristics, educational experiences and aspirations, financial situations, educational costs, and the sources of financial aid used to meet those costs. The institutional survey provided information on the student's educational level and demographic characteristics, and, for those who received financial assistance, the financial situation of students and their parents as well as the source and amount of that assistance. The parent survey provided information on the financial status of the parents, the level of support they gave to their children, and some demographic information regarding their own educational and occupational characteristics.

Data describing enrollment and educational offerings of less-than-4-year institutions were derived from the 1987–88 Integrated Postsecondary Data System (IPEDS) survey.[10] This survey includes data on all 4-year and 2-year institutions, all public less-than-2-year institutions, and a sample of private not-for-profit and private for-profit institutions.

---

[8] *Control of an institution* is defined as the source of the governing structure of the institution. *Public institutions* are those that are established by a public entity, usually the state, and receive appropriated funds for operating purposes. *Private not-for-profit institutions* are defined as nonprofit and under the control of a nonpublic board or other governing body. *Private for-profit institutions* are established for profit-making purposes.

[9] For a complete description of the NPSAS data file, see Westat, Inc., *Methodology Report for the National Postsecondary Student Aid Study, 1987* (Contractor Report to National Center for Education Statistics, March 1990).

[10] The 1987–88 IPEDS file was used because 1986–87 was the first year of IPEDS data collection as well as the first systematic attempt to collect data from private less-than-4-year institutions. Many of the problems encountered in 1986–87 were resolved the following year. Therefore, the data for 1987–88 were considered more reliable.

Organization of This Report

Chapter 2 of this report provides a description of enrollment and program offerings at less-than-4-year institutions using data from the IPEDS survey. Chapters 3, 4, and 5 use NPSAS:87 data to describe students enrolled in less-than-4-year public, private not-for-profit, and private for-profit institutions.[11] The sixth chapter compares students attending the different types of less-than-4-year institutions and further compares students attending less-than-4-year institutions with those attending 4-year institutions. The seventh and final chapter summarizes the findings of this study.

Differences among various groups of students were evaluated using a two-tailed t-test adjusted for multiple comparisons (Bonferroni adjustment). Differences reported here are significant at the $p \leq .05$ level for each family of tests. An explanation of this procedure is given in appendix A. Not all significant findings are presented. Student characteristics that are examined in this report are divided into four groups:

- Demographic and socioeconomic characteristics, including sex, age, marital status, dependent student's family income, and independent student's income.
- Educational goals, including ultimate degree objective and field of study.
- Student expenses, including the average amount paid for tuition and fees, housing, transportation, and miscellaneous expenses.
- Sources and average amounts of financial support.

[11] NPSAS does not include correspondence schools.

Chapter 2

Characteristics of Less-than-4-Year Institutions

Less-than-4-year institutions are not a homogeneous group. A major distinguishing characteristic of these institutions is whether or not they are part of the public or private sector, and further, among private institutions, whether or not they are organized as profit-making. This characteristic is referred to as *institutional control*, and for purposes of identification, the three types of institutional control are called public, private not-for-profit, and private for-profit.

Number of Less-than-4-Year Institutions and Size of Enrollment

Table 2.1 shows the number of less-than-4-year institutions and their enrollment size according to control of institution. In 1987–88, there were about 9,576 less-than-4-year institutions in the United States, representing a majority of the 12,282 postsecondary institutions nationwide. About two-thirds of the total number of less-than-4-year institutions were private for-profit, with the remaining third divided relatively evenly between public and private not-for-profit institutions. Enrollment in each type of less-than-4-year institution was not necessarily consistent with the number of institutions, however. Despite the large number of private for-profit institutions, they only enrolled about 800,000 students.[12] More than 80 percent of the students (almost 5 million) who were enrolled in less-than-4-year institutions attended public institutions. Private not-for-profit institutions accounted for the smallest number of students, a little more than 200,000.

Private not-for-profit and private for-profit less-than-4-year institutions had similar average numbers of students enrolled. Both types of institutions enrolled an average about 200 students per school, while public institutions were nearly 15 times larger, enrolling an average of about 2,900 students.

[12]See R.N. Apling and S.R.Aleman, *Proprietary Schools: A Description of Institutions and Students*, Congressional Research Service, August, 1990, for discussion of these institutions and the number of students attending.

Table 2.1—Number and enrollment of less-than-4-year institutions, by control: 1987–88

Number of institutions	
Public	1,642
Private not-for-profit	1,365
Private for-profit	6,569
Total less than-4-year	9,576
All postsecondary institutions	12,282

Enrollment	Total	Average enrollment
Public	4,764,677	2,901
Private not-for-profit	203,651	208*
Private for-profit	814,084	191*
Total less- than-4-year	5,782,412	
Total undergrads	12,391,860	

* Includes only those institutions reporting enrollment.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1987–88 Integrated Postsecondary Education Data System (IPEDS).

Educational Offerings

Less-than-4-year institutions tended to vary with respect to the type of educational programs they offered (table 2.2). As a group, public institutions offered a broad range of courses including occupational, academic, continuing education, recreational, and remedial. This breadth of offerings reflects the fact that many of these institutions are community colleges oriented to serving the diverse needs of the local community. Private for-profit institutions, on the other hand, were more narrowly focused, and were nearly twice as likely to offer occupational programs as they were academic programs. Private not-for-profit institutions were about as likely to offer academic programs as they were occupational programs. Relatively few private not-for-profit or private for-profit institutions offered recreational or remedial courses of study.

Table 2.2—Percentage of less-than-4-year institutions offering educational programs, by control of institution: 1987–88

	Occupational	Academic	Continuing*	Recreational	Adult/ remedial**	High school
Total	78	55	31	14	13	2
Public	86	88	44	51	61	5
Private not-for-profit	55	66	23	5	8	2
Private for-profit	81	47	31	9	4	2

* Refers to continuing professional education.
** Refers to basic or high school equivalency education.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1987–88 Integrated Postsecondary Education Data System (IPEDS).

Degrees Awarded

Table 2.3 shows the percentage of less-than-4-year institutions granting degrees in selected areas of study.[13] The overwhelming majority (91 percent) of public institutions and more than two-thirds of private for-profit institutions awarded degrees in business/marketing. Private not-for-profit institutions, on the other hand, were more likely to grant degrees in health (67 percent) than they were in business/marketing (22 percent). Unlike less-than-4-year institutions in the private sector, a majority of public institutions also awarded degrees in health (86 percent) or trades (74 percent), and more than two-thirds of these institutions awarded degrees in technical/engineering fields.

Table 2.3—Percentage of less-than-4-year institutions awarding degrees, certificates, or licenses in selected areas of study, by control of institution: 1987–88

	Business/ Marketing	Health	Trades	Technical/ Engineering
Total	71	73	50	54
Public	91	86	74	70
Private not-for-profit	22	67	5	15
Private for-profit	70	31	20	45

NOTE: The response rates to the IPEDS survey by less-than-4-year institutions varied among public, private not-for-profit, and for-profit institutions. For an explanation of the sampling procedure, see U.S. Department of Education, National Center for Education Statistics, *Data Base Documentation*, for the 1987–88 IPEDS Completions Survey.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1987–88 Integrated Postsecondary Education Data System (IPEDS).

[13]Degrees are defined here as any kind of formal award signifying completion of a course of study including certificates or associate's degrees.

Chapter 3

Students in Public Less-than-4-Year Institutions

Introduction

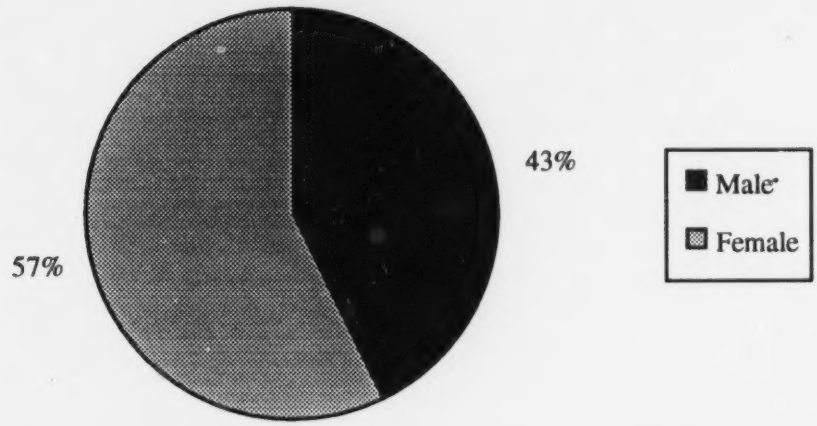
This chapter examines the characteristics of students who attended public less-than-4-year institutions in the fall of 1987. Public less-than-4-year institutions are made up largely of statewide systems of junior and community colleges. These institutions are designed to serve the postsecondary education needs of the community in which they are located. As the interests of the individual members of the community have changed, the purview of these institutions has broadened. Today these institutions may not only provide for the continuing education of recent high school graduates, but also offer basic adult education courses, vocational and retraining courses, academic and professional courses, and recreational courses. Students may have a number of reasons for attending these institutions including transferring to a 4-year institution; obtaining a certificate, an associate's degree, or a license; retraining or improving skills in a specific area; acquiring basic or remedial education; or taking nondegree or avocational courses.[14]

Demographic and Socioeconomic Characteristics

About 4.8 million students were enrolled in public less-than-4-year institutions in the fall of 1986. These students were more likely to be female (57 percent) than male (43 percent) (figure 3.1). This pattern existed for all racial–ethnic groups except for Asian students, who were more likely to be male (54 percent) than female (46 percent) (table 3.1). Financially independent students were also more likely to be female (62 percent) than male (38 percent), while dependent students were about equally likely to be male (49 percent) as female (51 percent).

[14]U.S. Department of Education, National Center for Education Statistics, *Transfer Students in Institutions of Higher Education,* NCES report # 77-250.

Figure 3.1—Percentage of students at public less-than-4-year institutions, by sex: Fall 1986



SOURCE: U.S. Department of Education, National Center for Education Statistics, 1986–87 National Postsecondary Student Aid Study (NPSAS:87).

Table 3.1—Percentage of students who were male and female at public less-than-4-year institutions, by race–ethnicity and dependency status: Fall 1986

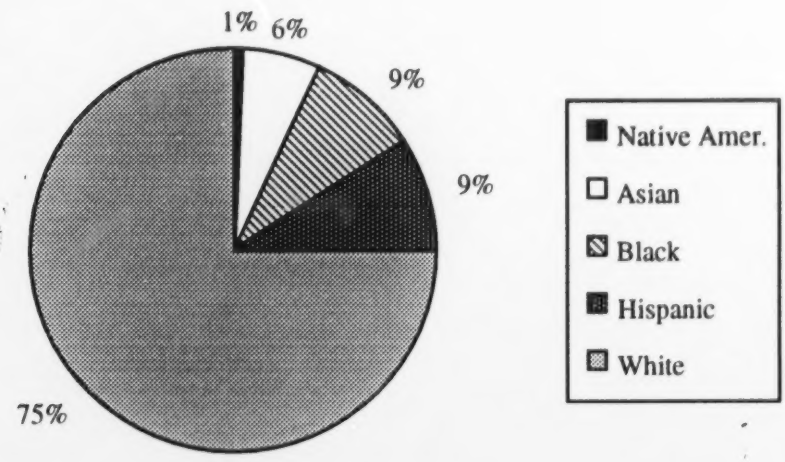
	Male	Female
Total	43	57
Race—ethnicity		
Native Am.	31	69
Asian	54	46
Black	39	61
Hispanic	43	57
White	44	56
Dependency		
Dependent	49	51
Independent	38	62

NOTE: Percentages may not sum to 100 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1986–87 National Postsecondary Student Aid Study (NPSAS:87).

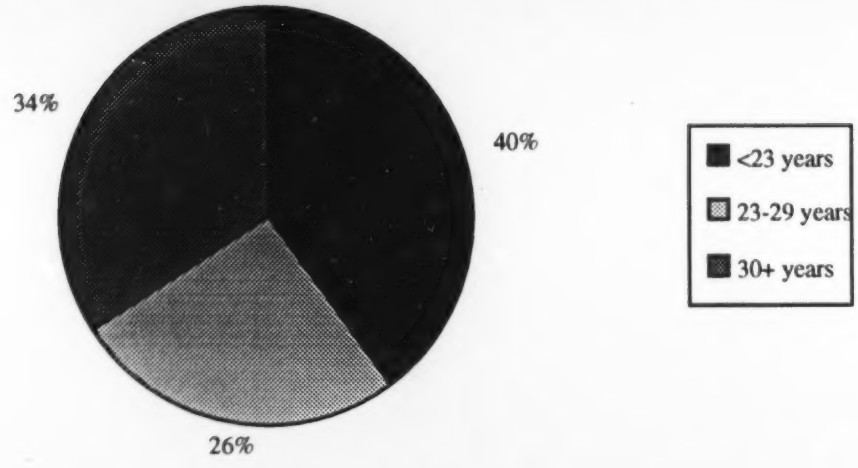
Students attending public less-than-4-year institutions are a diverse population in terms of their racial–ethnic backgrounds and age distribution (figures 3.2 and 3.3). About one-quarter of the students attending public less-than-4-year institutions were minority students, and about one-third (34 percent) were age 30 and over.

Figure 3.2—Percentage of students at public less-than-4-year institutions, by race–ethnicity: Fall 1986



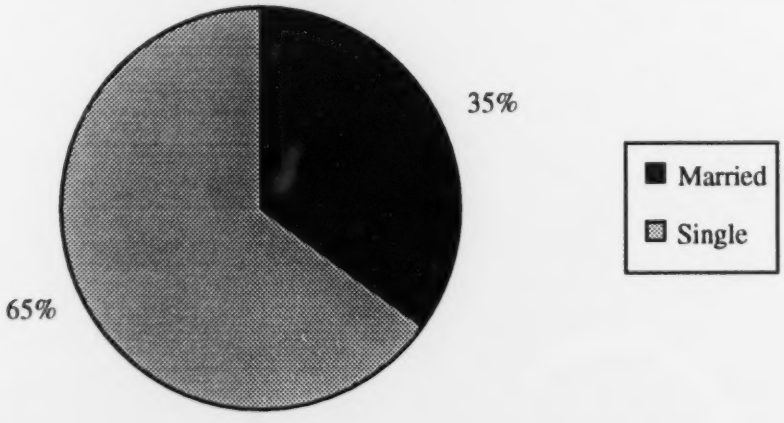
SOURCE: U.S. Department of Education, National Center for Education Statistics, 1986–87 National Postsecondary Student Aid Study (NPSAS:87).

Figure 3.3—Percentage of students at public less-than-4-year institutions, by age: Fall 1986



SOURCE: U.S. Department of Education, National Center for Education Statistics, 1986–87 National Postsecondary Student Aid Study (NPSAS:87).

Figure 3.4—Percentage of students attending public less-than-4-year institutions, by marital status: Fall 1986



SOURCE: U.S. Department of Education, National Center for Education Statistics, 1986–87 National Postsecondary Student Aid Study (NPSAS:87).

As one might expect, marital status varied across various subgroups of students. Table 3.2 shows the marital status of public less-than-4-year students according to their sex, age, attendance status, and dependency status. About 35 percent of these students were married (figure 3.4). Sixty-two percent of females were single, compared with 68 percent of the males. Not surprisingly, the percentage of single students in each age group dropped with increasing age, from 96 percent for those under the age of 19 to 37 percent for those age 30 and over. Further, 91 percent of dependent students were single, compared with only 39 percent of independent students.

Table 3.2—Percentage of students at public less-than-4-year institutions by marital status, and by selected student characteristics: Fall 1986

	Married	Single
Total	35	65
Sex		
Male	32	68
Female	38	62
Age		
Under 19	4	96
19–22	8	92
23–29	40	60
30 and over	63	37
Attendance status		
Full-time	21	79
Part-time	43	57
Dependency status		
Dependent	9	91
Independent	61	39

NOTE: Percentages may not sum to 100 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1986–87 National Postsecondary Student Aid Study (NPSAS:87).

Income

Approximately one-half of students in public less-than-4-year institutions were dependent on their parents (as defined in student financial aid regulations). For dependent students, family income reflects the income of the students' parents. For independent students, family income is the students' (and spouses') own income. Table 3.3a shows the percentage distribution of annual family income for dependent students, while table 3.3b shows the percentage distribution of independent students' income.

While dependent students' family income was widely distributed, the greatest percentage of dependent students came from families with annual incomes between $30,000 and $49,999 (33 percent). Equal percentages of students (about 16 percent) came from families with annual incomes of either less than $12,000 or between $50,000 and $74,999. Among independent students, almost one-half (47 percent) had incomes of $20,000 or more, while about one-fifth (21 percent) had annual incomes of less than $5,000.

Independent students who attended school full time tended to have lower incomes than those attending part time (table 3.3b). For example, nearly one-third of full-time students (31 percent) had incomes of less than $5,000, compared with only 17 percent of part-time students. Similarly, 28 percent of full-time students had incomes of $20,000 or more, compared with 54 percent of part-time students.

Table 3.3a—Percentage distribution of dependent students by annual family income at public less-than-4-year institutions, by attendance status: Fall 1986

	Less than $12,000	$12,000–23,999	$24,000–29,999	$30,000–49,999	$50,000–74,999	$75,000 or more
Total	16	22	12	33	16	1
Attendance status						
Full-time	17	23	11	32	15	1
Part-time	16	20	12	34	17	1

NOTE: Percentages may not sum to 100 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1986–87 National Postsecondary Student Aid Study (NPSAS:87).

Table 3.3b—Percentage distribution of independent students by annual student income at public less-than-4-year institutions, by attendance status: Fall 1986

	Less than $5,000	$5,000–9,999	$10,000–14,999	$15,000–19,999	$20,000 or more
Total	21	11	11	11	47
Attendance status					
Full-time	31	19	13	10	28
Part-time	17	8	11	11	54

NOTE: Percentages may not sum to 100 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1986–87 National Postsecondary Student Aid Study (NPSAS:87).

Educational Aspirations

A majority of students attending public less-than-4-year institutions were planning to further their education at higher level institutions—that is, they aspired to a bachelor's degree (40 percent), a master's degree (17 percent), or an advanced degree (6 percent). Others planned on completing their education at less-than-4-year institutions (table 3.4). For example, 13 percent and 24 percent, respectively, planned on completing their education by earning a certificate or an associate's degree.

Table 3.4—Percentage distribution of students' ultimate educational objective at public less-than-4-year institutions, by attendance status: Fall 1986

	Certificate	Associate degree	Bachelor degree	Masters degree	Advanced degree
Total	13	24	40	17	6
Attendance status					
Full-time	14	22	40	18	6
Part-time	13	25	39	17	6

NOTE: Percentages may not sum to 100 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1986–87 National Postsecondary Student Aid Study (NPSAS:87).

Cost of Attendance and Financial Aid

Relative to private institutions, the tuition and fees and other student expenditures required to attend public less-than-4-year institutions were low.[15] The average amount of tuition and fees students reported paying in the fall of 1986 was $333 (table 3.5). Other major expenditures included books ($189), rent ($2,205), transportation ($1,301), and all other expenses ($1,556). The relatively low amount students paid for rent compared with transportation may simply reflect the fact that many students attending public less-than-4-year institutions live at home and commute to school.

Table 3.5—Average amount of annual expenditures reported by students at public less-than-4-year institutions, by dependency and attendance status: Fall 1986

	Tuition and fees	Books	Rent	Transportation	Other
Total	$333	$189	$2,205	$1,301	$1,556
Dependency status					
Dependent	403	220	1,724	1,274	1,535
Independent	264	158	2,681	1,327	1,575
Attendance status					
Full-time	553	274	1,940	1,306	1,571
Part-time	204	139	2,366	1,298	1,548

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1986–87 National Postsecondary Student Aid Study (NPSAS:87).

[15]See the following chapters for comparisons. Note that all student expenditures in this report are actual expenses reported by the students. They are not financial aid budgets.

The average total amount dependent and independent students paid to attend public less-than-4-year institutions differed substantially. For example, average tuition and fees for dependent students was $403, compared with $264 for independent students. On the other hand, the average amount independent students paid for rent was $2,681, compared to only $1,724 for dependent students.

About one-third (33 percent) of students used financial aid to help pay the costs of attendance. One-fifth (20 percent) of these students received federal student aid (table 3.6a). Of the types of aid received, 25 percent of students reported receiving grants and 8 percent reported receiving loans.

Table 3.6a—Percentage of students at public less-than-4-year institutions receiving various types of financial support, by attendance and dependency status: Fall 1986

			Financial aid received			
					Type of aid	
	Self/ spouse	Parents	Any aid	Federal aid	Grants	Loans
Total*	10	27	33	20	25	8
Attendance status						
Full-time	11	28	50	37	40	15
Part-time	10	26	23	11	16	4
Dependency Status						
Dependent	9	30	29	17	21	7
Independent	12	24	37	24	29	9

* First three columns do not add to 100 percent because "Self/spouse" column includes only those students who paid for their education without parental support or financial aid. The "Parents" column includes students who received parental support but did not themselves financially contribute to their education.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1986–87 National Postsecondary Student Aid Study (NPSAS:87).

On average, students attending public less-than-4-year institutions who relied on their own or their parents contributions contributed $939 to their own education, while their parents contributed just over $1,000 (table 3.6b). Among students who received financial aid, the average amount received was $1,620. The amount students received in loan aid tended to be more than the amount received in grant aid.

Table 3.6b—Average amount of financial support received from various sources by students at public less-than-4-year institutions, by attendance and dependency status: Fall 1986

			Financial aid received			
					Type of aid	
	Self/ spouse	Parents	Any aid	Federal aid	Grants	Loans
Total	$939	$1,059	$1,620	$1,806	$1,285	$1,838
Attendance status						
Full-time	992	1,135	1,952	1,988	1,484	1,872
Part-time	905	1,010	1,195	1,439	981	1,756
Dependency status						
Dependent	796	996	1,442	1,615	1,198	1,702
Independent	1,051	1,135	1,759	1,934	1,345	1,933

NOTE: The amounts reflected in the "self/spouse" and "parents" columns are averaged over students who reported that these contributions were the only sources of financial support for their education (i.e., those students shown in table 3.5a).

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1986–87 National Postsecondary Student Aid Study (NPSAS:87).

The percentage of students receiving financial aid and the amount of aid they received differed according to their attendance status. For example, 37 percent of full-time students received federal aid, compared with 11 percent of part-time students (table 3.6a). Forty percent of full-time students received grants, while 16 percent of part-time students did so. The amounts of federal aid and grants received were about $500 less for part-time students than for full-time students. The average loan amount, however, was about the same for both groups of students (table 3.6b).

The eligibility requirements for receiving financial aid varied according to dependency and attendance status. Significant differences were observed between dependent and independent students in the percentages of students who received aid and the average amount of aid they received. For example, 17 percent of dependent students received federal aid, while 24 percent of independent students received federal aid (table 3.6a). A higher proportion of independent students received grants (29 percent) than did dependent students (21 percent). Independent students also, on average, received higher average amounts of all types of aid than did dependent students.

Chapter 4

Students at Private Not-for-Profit Less-than-4 Year Institutions

Introduction

As discussed in chapter 2, the number of private not-for-profit less-than-4-year institutions was small relative to other types of postsecondary institutions, as was their total enrollment. In 1987–88, private not-for-profit less-than-4-year institutions made up about 11 percent of the total number of institutions and less than 2 percent (1.6 percent) of the total undergraduate enrollment.[16]

Private not-for-profit less-than-4-year institutions have been in existence for most of this century. By 1922 most of the 48 states contained junior colleges, more than half of which were privately supported.[17] Private junior colleges flourished in the 1940s and in 1949 reached their high point in numbers and enrollment. More than half of these private junior colleges were affiliated with churches,[18] while the rest were independently operated. Since that time, with the advent of public community colleges, the number and enrollment in private junior colleges has steadily declined.[19]

Demographic and Socioeconomic Characteristics

Among the approximately 200,000 students attending private not-for-profit less-than-4-year institutions in the fall of 1986, about 63 percent were female (figure 4.1). Females were also in the majority among all racial–ethnic groups (table 4.1). The smallest proportion of females was found among Asian students (56 percent), while the largest proportion was among black students (67 percent). A greater proportion of independent students (71 percent) than dependent students (59 percent) were also female.

---

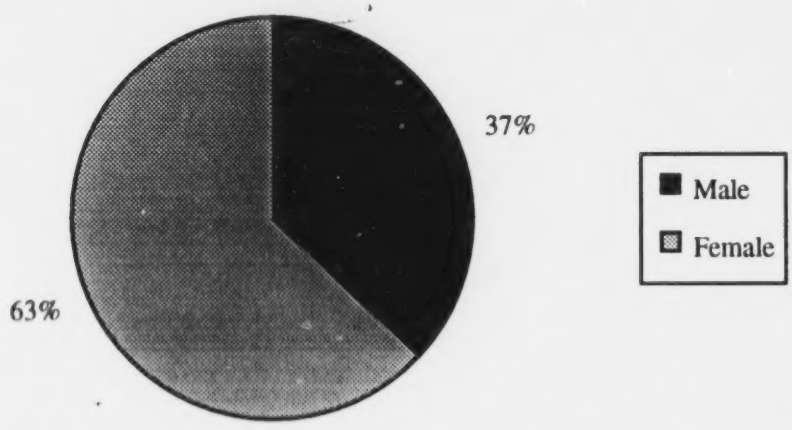
[16]See table 2.1.

[17]A.M. Cohen and F.B. Brawer, *The American Community College*, Jossey-Bass Publishers, 1982, 9.

[18]Many were established for Black students and by the Catholic Church. See *From Isolation to Mainstream*, Carnegie Commission on Higher Education, February 1971, and *From Backwater to Mainstream*, Andrew Greeley, for the Carnegie Commission on Higher Education, 1969.

[19]Cohen & Brawer, 10.

Figure 4.1—Percentage of students at private not-for-profit less-than-4-year institutions, by sex: Fall 1986



SOURCE: U.S. Department of Education, National Center for Education Statistics, 1986–87 National Postsecondary Student Aid Study (NPSAS:87).

Table 4.1—Percentage of male and female students at private not-for-profit less-than-4-year institutions, by race–ethnicity and dependency status: Fall 1986

	Male	Female
Total	37	63
Race—ethnicity		
Native American	—	—
Asian	44	56
Black	33	67
Hispanic	37	63
White	34	66
Dependency status		
Dependent	41	59
Independent	29	71

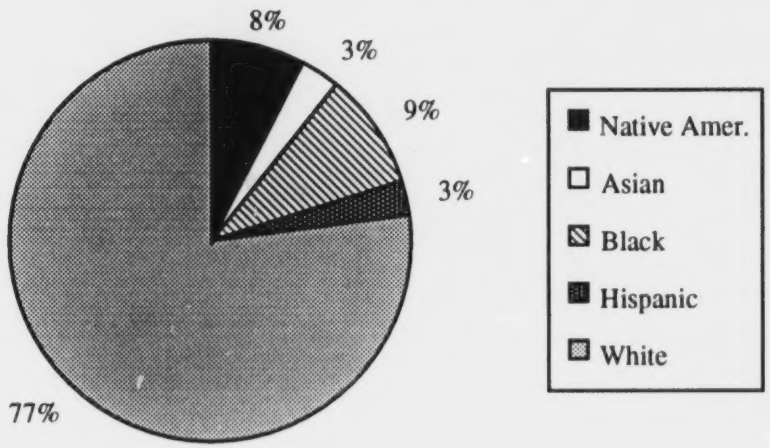
— Sample too small for reliable estimate.

NOTE: Percentages may not sum to 100 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1986–87 National Postsecondary Student Aid Study (NPSAS:87).

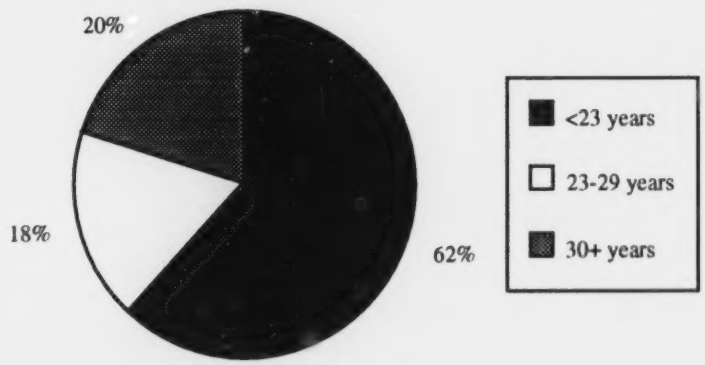
Like public less-than-4-year institutions, about one-quarter of the students attending equivalent private not-for-profit institutions were minority students (figure 4.2). A majority of students attending these institutions (62 percent) were under the age of 23, while about one-fifth were age 30 years and over (figure 4.3).

Figure 4.2—Percentage of students at private not-for-profit less-than-4-year institutions, by race–ethnicity: Fall 1986



SOURCE: U.S. Department of Education, National Center for Education Statistics, 1986–87 National Postsecondary Student Aid Study (NPSAS:87).

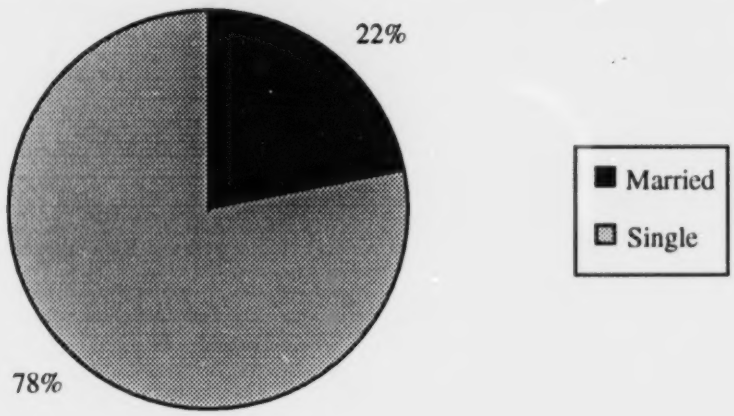
Figure 4.3—Percentage of students at private not-for-profit less-than-4-year institutions, by age: Fall 1986



SOURCE: U.S. Department of Education, National Center for Education Statistics, 1986–87 National Postsecondary Student Aid Study (NPSAS:87).

Students attending private not-for-profit less-than-4-year institutions tended to be younger than their counterparts in public institutions, which is consistent with the large majority (78 percent) who were single (figure 4.4). As their age increased, however, so did their likelihood of being married (table 4.2). For example, nearly all students under the age of 19 were single, compared with only 38 percent of those age 30 and over. Marital status also differed according to students' attendance status. Eighty-six percent of the full-time students were single, as opposed to 59 percent of part-time students. The overwhelming majority of dependent students were single (93 percent), compared with less than one-half (47 percent) of the independent students. Again, this result reflects the finding that full-time, dependent students tended to be younger than part-time, independent students.

Figure 4.4—Percentage of students at private not-for-profit less-than-4-year institutions, by marital status: Fall 1986



SOURCE: U.S. Department of Education, National Center for Education Statistics, 1986–87 National Postsecondary Student Aid Study (NPSAS:87).

Table 4.2—Percentage of married and single students at private not-for-profit less-than-4-year institutions, by selected student characteristics: Fall 1986

	Married	Single
Total	22	78
Sex		
Male	20	80
Female	23	77
Age		
Under 19	1	99
19–22	6	94
23–29	36	64
30 and over	62	38
Attendance status		
Full-time	14	86
Part-time	41	59
Dependency status		
Dependent	7	93
Independent	53	47

NOTE: Percentages may not sum to 100 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1986–87 National Postsecondary Student Aid Study (NPSAS:87).

The distribution of family income for students attending private not-for-profit less-than-4-year institutions was similar to that of students attending public institutions. Nearly one-third (31 percent) came from families with annual incomes between $30,000 and $49,999 (table 4.3a).[20] About 18 percent were from families whose incomes were less than $12,000, while only 2 percent were from families with annual incomes of $75,000 or more. Among independent students, most fell into either the lowest or highest income ranges: 28 percent had annual incomes of less than $5,000, while 35 percent had annual incomes of $20,000 or more (table 4.3b). This income distribution, however, was associated with differences in full-time and part-time enrollment. Part-time students tended to be in the highest income range, while full-time students were more often in the lowest range: 52 percent of part-time students had incomes of $20,000 or more, compared with only 21 percent of the full-time students. Likewise, 34 percent of the full-time students had incomes of less than $5,000, while only 20 percent of the part-time students were in the same income range.

[20]See table 3.3a for a comparison with public less-than-4-year institutions.

Table 4.3a—Percentage of dependent students' annual family income at private not-for-profit less-than-4-year institutions, by attendance status: Fall 1986

	Less than $12,000	$12,000–23,999	$24,000–29,999	$30,000–49,999	$50,000–74,999	$75,000 or more
Total	18	25	11	31	14	2
Attendance status						
Full-time	18	21	10	33	16	2
Part-time	17	37	13	26	4	2

NOTE: Percentages may not sum to 100 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1986–87 National Postsecondary Student Aid Study (NPSAS:87).

Table 4.3b—Percentage of independent students at private not-for-profit less-than-4-year institutions, by annual student income and by attendance status: Fall 1986

	Less than $5,000	$5,000–9,999	$10,000–14,999	$15,000–19,999	$20,000 or more
Total	28	15	12	10	35
Attendance status					
Full-time	34	20	15	10	21
Part-time	20	10	9	10	52

NOTE: Percentages may not sum to 100 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1986–87 National Postsecondary Student Aid Study (NPSAS:87).

Educational Aspirations

Similar to students attending public less-than-4-year institutions, 40 percent of those at equivalent private not-for-profit institutions intended to finish their education in less-than-4-year institutions: about 17 percent sought a certificate, while 23 percent aspired to an associate's degree as their ultimate educational goal (table 4.4).[21] On the other hand, about one-third (35 percent) aspired to a bachelor's degree, while one-quarter of students at these institutions had even higher educational objectives.

[21]See table 3.4 for a comparison with public less-than-4-year institutions.

Table 4.4—Percentage distribution of students' ultimate educational objective at private not-for-profit less-than-4-year institutions, by attendance status: Fall 1986

	Certificate	Associate degree	Bachelor degree	Master degree	Advanced degree
Total	17	23	35	18	7
Attendance status					
Full-time	14	21	36	21	8
Part-time	24	26	32	13	5

NOTE: Percentages may not sum to 100 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1986–87 National Postsecondary Student Aid Study (NPSAS:87).

Cost of Attendance and Financial Aid

Whereas the students enrolled in public less-than-4-year institutions paid relatively little in tuition and fees to attend, students attending private not-for-profit less-than-4-year institutions reported paying substantially more (table 4.5). For example, tuition and fees averaged $333 at public institutions, compared with $2,440 at private not-for-profit institutions.

Among the three types of less-than-4-year institutions, only the private not-for-profit less-than-4-year institutions generally provide campus housing.[22] Table 4.5 shows that the amounts students paid for on-campus housing ($1,097) were lower than those paid for off-campus housing ($1,443). It is interesting to note that on-campus housing expenses were lower for independent students than for dependent students ($945 compared with $1,075). In contrast, independent students paid much more for transportation and off-campus housing than did dependent students, consistent with the increased likelihood that independent students were married and commuted to school.

[22]For example, about 33 percent of students at these institutions lived on campus, compared with 2 percent at proprietary less-than-4-year institutions and 2 percent at public less-than-4-year institutions. Because the percentages for the latter two types of institutions were so low, the average amounts for on-campus housing were not included in this report. Note that these are student-reported expenditures, not financial aid budgets.

Table 4.5—Average amount of annual expenditures reported by students at private not-for-profit less-than-4-year institutions, by dependency and attendance status: Fall 1986

	Tuition and fees	Books	Off-campus rent*	On-campus rent	Trans-portation	Other
Total	$2,440	$275	$1,443	$1,097	$1,028	$1,448
Dependency status						
Dependent	2,502	301	999	1,075	971	1,456
Independent	2,313	221	2,310	945	1,143	1,431
Attendance status						
Full-time	3,075	324	1,275	1,021	1,055	1,306
Part-time	951	136	1,878	1,119	966	1,784

*Includes living with parents for dependent students.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1986–87 National Postsecondary Student Aid Study (NPSAS:87).

Compared with attending public less-than-4-year institutions, the relatively high cost of attending equivalent private not-for-profit institutions increased the likelihood of students receiving financial aid and tended to increase the amount of student aid they received (tables 4.6a and 4.6b). A greater proportion of parents also contributed to their children's education among students attending private not-for-profit less-than-4-year institutions than did parents whose children attended public institutions.[23] About one-half (52 percent) of dependent students' parents contributed an average of $3,237, while about one-quarter (27 percent) of independent students' parents contributed an average of $2,569. A majority of students (69 percent) received some kind of financial aid, 49 percent of whom received aid from the federal government. A greater proportion of students received grants than loans (54 percent compared with 36 percent). Independent students were more likely than dependent students to receive grants (60 percent compared with 50 percent), but the average grant amount awarded to the two groups was similar ($2,268 compared with $2,336).

[23]See table 3.5 for a comparison with public less-than-4-year institutions.

Table 4.6a—Percentage of students at private not-for-profit less-than-4-year institutions receiving various types of financial support, by attendance and dependency status: Fall 1986

			Federal aid received			
					Type of aid	
	Self/spouse	Parents	Any aid	Federal aid	Grants	Loans
Total	7	44	69	49	54	36
Attendance status						
Full-time	7	52	74	58	62	44
Part-time	8	26	55	28	33	17
Dependency status						
Dependent	6	52	67	44	50	34
Independent	10	27	72	60	60	42

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1986–87 National Postsecondary Student Aid Study (NPSAS:87).

Table 4.6b—Average amount of financial support received by students at private not-for-profit less-than-4-year institutions, by attendance and dependency status: Fall 1986

			Financial aid received			
					Type of aid	
	Self/spouse	Parents	Any aid	Federal aid	Grants	Loans
Total	$1,097	$3,100	$3,170	$2,682	$2,311	$2,294
Attendance status						
Full-time	1,193	3,389	3,676	2,798	2,529	2,310
Part-time	909	1,722	1,557	2,124	1,331	2,193
Dependency status						
Dependent	1,078	3,237	3,093	2,601	2,336	2,239
Independent	1,119	2,569	3,315	2,802	2,268	2,385

NOTE: Amounts are averaged over students who reported receiving support in each category.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1986–87 National Postsecondary Student Aid Study (NPSAS:87).

Chapter 5

Students at Private For-Profit Less-than-4-Year Institutions

Introduction

Private for-profit less-than-4-year institutions, the most numerous type of postsecondary institution, were established to fill the need for short-term training of workers for various occupations requiring more advanced training than that received in either high school or on the job, but less than a bachelor's degree. These institutions tend to be small, averaging fewer than 200 students, compared with an average enrollment of almost 3,000 students at public less-than-4-year institutions.[24]

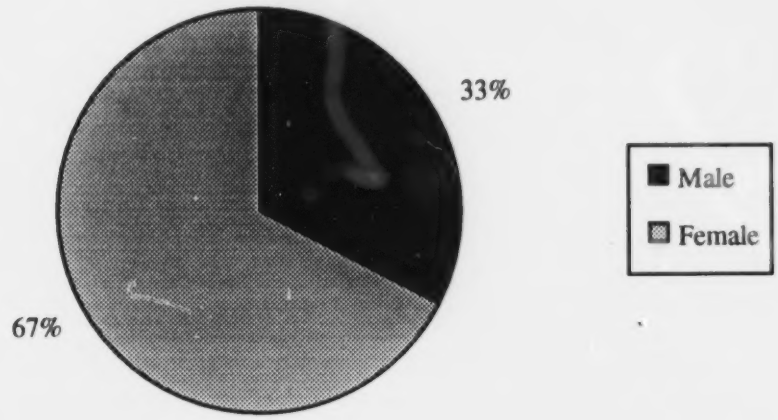
Demographic and Socioeconomic Characteristics

A large proportion of students who attended private for-profit less-than-4-year institutions in the fall of 1986 were female or minority students. Among private for-profit students, 67 percent were female,14 percent were Hispanic, and 21 percent black (figures 5.1 and 5.2). In fact, students with these attributes attended private for-profit institutions in higher proportions than students who attended either public or private not-for-profit less-than-4-year institutions.[25] Furthermore, among black, Hispanic, and Native American students, more than 70 percent were female (table 5.1). In addition, a higher proportion of females were found among independent students (70 percent) than among dependent students (64 percent).

[24]See table 2.1.

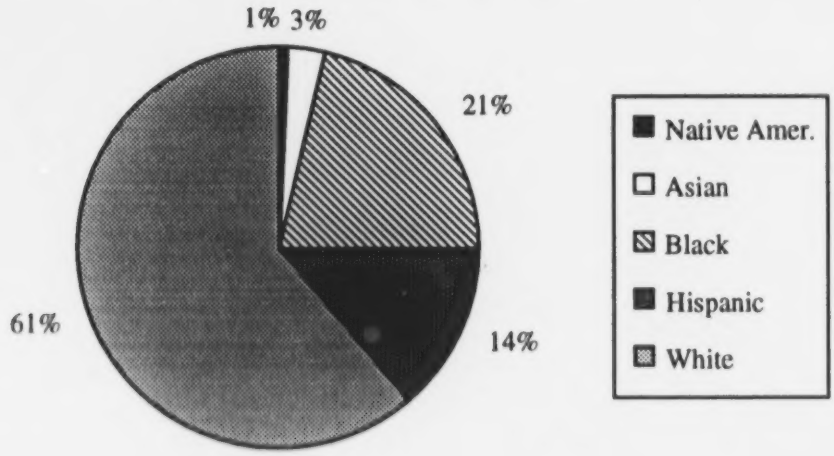
[25]See figures 3.1 and 4.1 for comparisons.

Figure 5.1—Percentage of students at private for-profit less-than-4-year institutions, by sex: Fall 1986



SOURCE: U.S. Department of Education, National Center for Education Statistics, 1986–87 National Postsecondary Student Aid Study (NPSAS:87).

Figure 5.2—Percentage of students at private for-profit less-than-4-year institutions, by race–ethnicity: Fall 1986



SOURCE: U.S. Department of Education, National Center for Education Statistics, 1986–87 National Postsecondary Student Aid Study (NPSAS:87).

Table 5.1—Percentage of males and females at private for-profit less-than-4-year institutions, by race–ethnicity and dependency status: Fall 1986

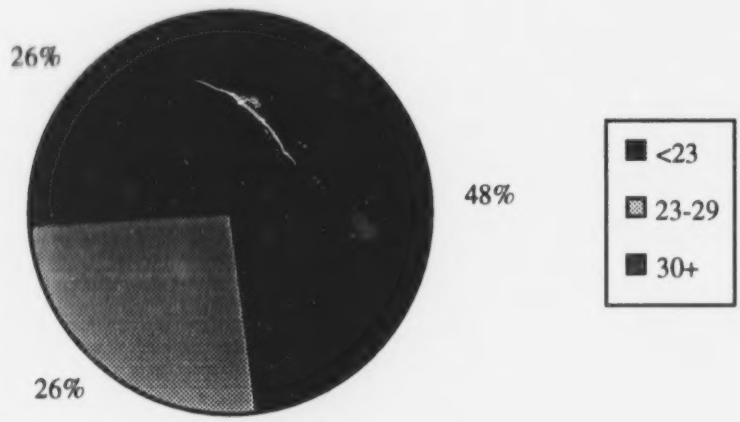
	Male	Female
Total	33	67
Race–ethnicity		
Native American	29	71
Asian	46	54
Black	28	72
Hispanic	29	71
White	35	65
Dependency status		
Dependent	36	64
Independent	30	70

NOTE: Percentages may not sum to 100 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1986–87 National Postsecondary Student Aid Study (NPSAS:87).

About one-half (48 percent) of the students attending private for-profit less-than-4-year institutions were under the age of 23 (figure 5.3). Approximately one-quarter were either between the ages of 23 to 29 or age 30 and over (26 percent for each group).

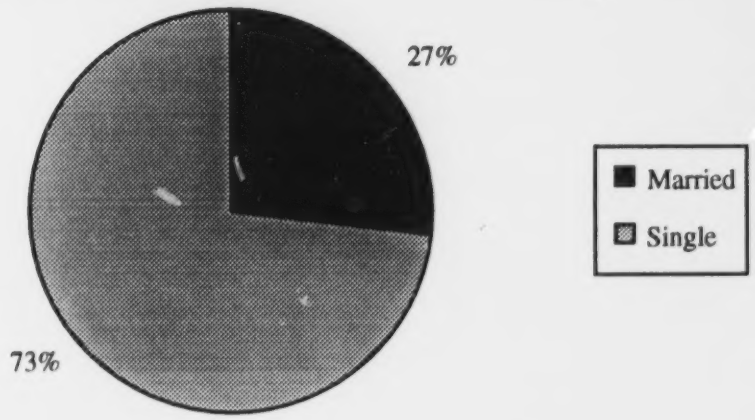
Figure 5.3—Percentage of students at private for-profit less-than-4-year institutions, by age: Fall 1986



SOURCE: U.S. Department of Education, National Center for Education Statistics, 1986–87 National Postsecondary Student Aid Study (NPSAS:87).

About one-quarter (27 percent) of the students attending private for-profit less-than-4-year institutions were married (figure 5.4). In addition, consistent with the findings for students attending other less-than-4-year institutions, dependent and full-time students were more likely to be single than were independent or part-time students (table 5.2).

Figure 5.4—Percentage of students at private for-profit less-than-4-year institutions, by marital status: Fall 1986



SOURCE: U.S. Department of Education, National Center for Education Statistics, 1986–87 National Postsecondary Student Aid Study (NPSAS:87).

Table 5.2—Percentage of married and single students at private for-profit less-than-4-year institutions, by selected student characteristics: Fall 1986

	Married	Single
Total	27	73
Sex		
Male	28	72
Female	26	74
Age		
Under 19	4	96
19–22	15	85
23–29	32	68
30 and over	49	51
Attendance status		
Full-time	25	75
Part-time	36	64
Dependency status		
Dependent	7	93
Independent	43	57

NOTE: Percentages may not sum to 100 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1986–87 National Postsecondary Student Aid Study (NPSAS:87).

Income

Relative to students in other less-than-4-year institutions, those in private for-profit institutions tended to have lower incomes.[26] For example, more than one-half of dependent students were from families with annual incomes of less than $24,000 (table 5.3a). Likewise, about one-third of independent students had annual incomes of less than $5,000 (table 5.3b).

Similar to students in other less-than-4-year institutions, financially independent full-time students were more likely to be in the lower income ranges than were part-time students. For example, 36 percent of full-time students had annual incomes of less than $5,000, compared with 23 percent of part-time students.

Table 5.3a—Percentage distribution of dependent students' annual family income at private for-profit less-than-4-year institutions, by attendance status: Fall 1986

	Less than $12,000	$12,000–23,999	$24,000–29,999	$30,000–49,999	$50,000–74,999	$75,000 or more
Total	30	26	12	24	8	1
Attendance status						
Full-time	30	26	11	24	8	1
Part-time	30	18	13	19	8	1

NOTE: Percentages may not sum to 100 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1986–87 National Postsecondary Student Aid Study (NPSAS:87).

Table 5.3b—Percentage distribution of independent students' annual income at private for-profit less-than-4-year institutions, by attendance status: Fall 1986

	Less than $5,000	$5,000–9,999	$10,000–14,999	$15,000–19,999	$20,000 or more
Total	34	23	15	10	19
Attendance status					
Full-time	36	24	14	9	17
Part-time	23	22	15	13	27

NOTE: Percentages may not sum to 100 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1986–87 National Postsecondary Student Aid Study (NPSAS:87).

[26]See tables 3.3a and 3.3b and 4.4a and 4.4b for comparisons with other less-than-4-year institutions.

Educational Aspirations

Students attending private for-profit less-than-4-year institutions were far more likely to seek a certificate as their ultimate educational objective than were students attending other less-than-4-year institutions: approximately one-half of private for-profit students planned only on obtaining a certificate, compared with less than 20 percent of those attending other institutions (table 5.4).[27] An additional 20 percent of private for-profit students aspired to an associate's degree, while nearly one-third sought higher degrees.

Table 5.4—Percentage distribution of students' ultimate educational objective at private for-profit less-than-4-year institutions, by attendance status: Fall 1986

	Certificate	Associate degree	Bachelor degree	Master degree	Advanced degree
Total	50	20	20	7	2
Attendance					
Full-time	49	21	20	7	2
Part-time	55	14	21	8	2

NOTE: Percentages may not sum to 100 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1986–87 National Postsecondary Student Aid Study (NPSAS:87).

Cost of Attendance and Financial Aid

Private for-profit institutions are privately owned and rely almost entirely on tuition and fees to generate revenues. Moreover, these institutions are largely located in urban and suburban areas, and many of the students commute to school.[28] Therefore, on-campus housing is typically not available. Table 5.5 shows the average student-reported expenditures at private for-profit less-than-4-year institutions. Students attending these private for-profit institutions were more likely than students in other less-than-4-year institutions to attend school full time (84 percent attended full time compared with 70 percent and 37 percent, respectively, in private not-for-profit and public institutions—see table 6.1 for a summary comparison). Thus, the average amount students attending these institutions paid for tuition and fees ($3,193) was higher than that for students in either public or private not-for-profit less-than-4-year institutions.[29] In addition, the average amount that students attending private for-profit institutions reported paying for rent ($2,581) was the highest among the three types of less-than-4-year institutions.

[27]See tables 3.4 and 4.4 for comparisons with other less-than-4-year institutions.

[28]In 1987–88, about 95 percent of the proprietary less-than-4-year institutions were located within a Standard Metropolitan Statistical Area (SMSA), as defined by the U.S. Bureau of the Census. Data derived from unpublished tabulations from the IPEDS 1988 Institutional Characteristics File and the City Reference File, 1987.

[29]See tables 3.5 and 4.5 for comparisons with other less-than-4-year institutions. Note that these are student-reported expenditures, not financial aid budgets. It is probable that the average amount reported for tuition and fees ($3,193) is underestimated.

Table 5.5—Average amount of annual expenditures reported by students at private for-profit less-than-4-year institutions, by dependency and attendance status: Fall 1986

	Tuition and fees	Books	Rent	Transportation	Other
Total	$3,193	$328	$2,581	$1,070	$1,855
Dependency status					
Dependent	3,453	362	3,584	1,063	1,815
Independent	2,976	299	1,744	1,076	1,888

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1986–87 National Postsecondary Student Aid Study (NPSAS:87).

Dependent students tended to be younger and more often attended school full time than did independent students. Therefore, on average, they paid more for tuition and fees than did independent students ($3,453 compared with $2,976). Unlike dependent students attending public less-than-4-year institutions, however, dependent students attending private for-profit institutions reported higher expenditures for rent than did independent students.[30]

Students in private for-profit less-than-4-year institutions have received a significant portion of the available federal Title IV aid (table 5.6a) relative to these schools' share of enrollment.[31] Given the expense of attending private for-profit less-than-4-year institutions coupled with the relatively low incomes of students enrolled, a large majority of students attending these institutions (85 percent) received some sort of financial aid. Moreover, the average amount of financial aid awarded was higher for private for-profit students than for those attending other less-than-4-year institutions (table 5.6b).[32] For example, the average amount of total aid received was $3,652, compared with $1,620 and $3,170 received by students attending public or private not-for-profit less-than-4-year institutions. Similar to students attending other less-than-4-year institutions, the average amount of grant aid awarded was higher for independent students ($2,136) than it was for dependent students ($1,840).

[30]See table 3.5 for a comparison with public less-than-4-year institutions. However, it is difficult to make comparisons between independent and dependent students since independent students more often attended school part time. Both types of students sometimes reported their entire rent as an education expenditure and sometimes reported no housing expenditures.

[31]In 1986–87, the for-profit institutions received about 14 percent of the Title IV aid going to undergraduates. Data from the U.S. Department of Education, National Center of Education Statistics, *Undergraduate Financing of Postsecondary Education, A Report of the 1987 National Postsecondary Student Aid Study* (Washington, DC 1988).

[32]See tables 3.6b and 4.6b for comparisons with other less-than-4-year institutions.

Table 5.6a—Percentage of students at private for-profit less-than-4-year institutions receiving various types of financial support, by attendance and dependency status: Fall 1986

			Financial aid received			
					Type of aid	
	Self/spouse	Parents	Any aid	Federal aid	Grants	Loans
Total	10	28	85	81	61	71
Attendance status						
Full-time	10	29	87	82	62	71
Part-time	7	23	79	74	60	71
Dependency status						
Dependent	8	33	81	76	53	69
Independent	10	23	89	85	67	72

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1986–87 National Postsecondary Student Aid Study (NPSAS:87).

Table 5.6b—Average amount of financial support received by students at private for-profit less-than-4-year institutions, by attendance and dependency status: Fall 1986

			Financial aid recieved			
					Type of aid	
	Self/spouse	Parents	Any aid	Federal aid	Grants	Loans
Total	$1,390	$1,963	$3,652	$3,369	$2,018	$2,592
Attendance status						
Full-time	1,449	1,967	3,704	3,381	2,093	2,608
Part-time	967	1,939	3,353	3,297	1,568	2,507
Dependency status						
Dependent	1,397	2,138	3,586	3,347	1,840	2,702
Independent	1,386	1,752	3,703	3,385	2,136	2,503

NOTE: Amounts are averaged over students who reported receiving support in each category.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1986–87 National Postsecondary Student Aid Study (NPSAS:87).

Chapter 6

Comparisons Among Students Enrolled in Different Types of Less-than-4-Year Institutions, and Comparisons Between Less-than-4-Year Students and Students Enrolled in 4-Year Institutions

This chapter summarizes differences among students enrolled in the three types of less-than-4-year institutions discussed in the previous chapters of this report. In addition, reference is made to the composition of the entire postsecondary student population in relation to those attending less-than-4-year institutions. Finally, less-than-4-year students are compared with students enrolled in 4-year institutions. These comparisons are presented separately for public and private not-for-profit institutions. Because there are so few 4-year private for-profit institutions, the sample of private for-profit students in these institutions is not sufficiently large to make valid comparisons with students enrolled in less-than-4-year private for-profit institutions.[33]

Comparisons Among Students in Different Less-than-4-Year Institutions

Table 6.1 presents a summary of selected characteristics of students enrolled at the three types of less-than-4-year institutions, as well as those enrolled in all postsecondary institutions. As is evident in this table, the proportion of females attending less-than-4-year institutions in the private sector—both not-for-profit and for-profit—was higher than the proportion attending public less-than-4-year institutions. The racial–ethnic group distribution, however, was similar for public and private not-for-profit less-than-4-year institutions, which in turn reflects the distribution of all postsecondary students. Private for-profit institutions, on the other hand, enrolled a greater proportion of minority students, particularly black students, than the other less-than-4-year institutions (21 percent of the student population was black, compared with 9 percent for the other two types of less-than-4-year institutions).

The age distribution among students attending public less-than-4-year institutions is relatively evenly divided between younger students (under the age of 23) and older students (age 30 and over). In contrast, proportionately three times as many younger students attended private not-for-profit institutions as did older students. This distribution—including predominantly younger students—also reflects that of all postsecondary students. Furthermore, since younger students were less likely to be part time, married, or independent, it is not surprising to see a higher proportion of students with these attributes enrolled in public less-than-4-year institutions than in private not-for-profit institutions.

---

[33]The Integrated Postsecondary Education Data System (IPEDS) indicated a total of about 120 4-year private for-profit institutions.

Table 6.1—Percentage of students at less-than-4-year institutions and at all postsecondary institutions, by selected student characteristics: Fall 1986

	Public	Private not-for-profit	Private for-profit	All postsecondary students
Total	100	100	100	100
Sex				
Male	43	37	33	45
Female	57	63	67	55
Race–ethnicity				
Native American	1	8	1	1
Asian	6	3	3	5
Black	9	9	21	9
Hispanic	9	3	14	7
White	75	77	61	78
Age				
Under 23	40	62	48	60
23–29	26	18	26	17
30 and over	34	20	26	23
Marital status				
Married	35	22	27	24
Single	65	78	73	76
Attendance status				
Full-time	37	70	84	62
Part-time	63	30	16	38
Dependency status				
Dependent	49	67	46	63
Independent	52	33	54	37

*The sample of Native American students is small, resulting in relatively high standard errors, especially for those attending private not-for-profit institutions (s.e.=6.8)

NOTE: Percentages sum vertically and may not sum to 100 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1986–87 National Postsecondary Student Aid Study (NPSAS:87).

Comparison of Students Enrolled in Less-than-4-Year Institutions with Students Enrolled in 4-Year Institutions: Public Sector

Demographic and Socioeconomic Characteristics

As shown in table 6.2, the gender distribution of students attending 4-year and less-than-4-year institutions in the public sector was relatively similar (for example, 57 percent and 53 percent, respectively, of students in these institutions were female). However, some gender differences were noted among students attending the two types of institutions across racial–ethnic groups. For example, among Native American and Hispanic students, the proportions of students who were female were greater in less-than-4-year institutions than in 4-year institutions (69 percent versus 56 percent for Native Americans, and 57 percent versus 48 percent for Hispanic students).

Table 6.2—Percentage of males and females at public less-than-4-year and public 4-year institutions, by race–ethnicity: Fall 1986

	Less-than-4-year		4-year	
	Male	Female	Male	Female
Total	43	57	47	53
Race				
Native American	31	69	44	56
Asian	54	46	58	42
Black	39	61	36	64
Hispanic	43	57	52	48
White	44	56	47	53

NOTE: Percentages may not sum to 100 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1986–87 National Postsecondary Student Aid Study (NPSAS:87).

Other differences between public less-than-4-year and 4-year institutions were found in relation to racial–ethnic group and age distributions (table 6.3). Among students in 4-year institutions, there was a greater proportion of white students who attended than among students attending less-than-4-year institutions (84 percent compared with 75 percent). On the other hand, greater proportions of Hispanic students attended public less-than-4-year institutions than attended equivalent 4-year institutions (9 percent compared with 2 percent). Less-than-4-year institutions had a greater percentage of older students enrolled, in particular those 30 years old and over, than did 4-year institutions (34 percent compared with 24 percent), while 4-year institutions had a greater proportion of students under the age of 23 enrolled (56 percent compared with 40 percent). Given these differences in age distributions, it follows that married students would be more likely to attend less-than-4-year institutions than to attend 4-year institutions in the public sector (35 percent compared with 22 percent).

Table 6.3—Percentage of students at public less-than-4-year and 4-year institutions, by selected student characteristics: Fall 1986

	Less-than-4-year	4-year
Total	100	100
Race—ethnicity		
Native American	1	1
Asian	6	5
Black	9	8
Hispanic	9	2
White	75	84
Age		
Under 23	40	56
23–29	26	20
30 and over	34	24
Marital Status		
Single	65	78
Married	35	22
Attendance status		
Full-time	37	75
Part-time	63	25

NOTE: Percentages sum vertically and may not sum to 100 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1986–87 National Postsecondary Student Aid Study (NPSAS:87).

Income

The income level reported by students attending public less-than-4-year and 4-year institutions did not differ significantly for dependent students, but did vary greatly for independent students (table 6.4). For example, about one-third of dependent students at both types of public institutions had family incomes in the middle range ($30,000–49,999). In contrast, the distribution of independent students attending less-than-4-year institutions tended to be in the higher income ranges more often than among those attending 4-year institutions. For example, nearly one-half (47 percent) of independent students attending less-than-4-year institutions had incomes of $20,000 or more, compared with only 13 percent of students in 4-year institutions. Similarly, 36 percent of students attending 4-year institutions had incomes below $5,000, compared with 21 percent among those at less-than-4-year institutions. This difference may partly be a function of the difference in the age distributions of students in these two types of public institutions. Older students who are more likely to attend less-than-4-year institutions also tend to have higher incomes.

Table 6.4—Percentage of students at public less-than-4-year and 4-year institutions, by dependent family income and independent student income: Fall 1986

	Less-than-4-year	4-year
Total	100	100
Dependent student's family income		
Less than $12,000	16	19
$12,000–23,999	22	29
$24,000–29,999	12	12
$30,000–49,999	33	30
$50,000–74,999	16	8
$75,000 or more	1	1
Independent student's income		
Less than $5,000	21	36
$5,000–9,999	11	27
$10,000–14,999	11	14
$15,000–19,999	11	10
$20,000 or more	47	13

NOTE: Percentages sum vertically and may not sum to 100 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1986–87 National Postsecondary Student Aid Study (NPSAS:87).

Costs of Attendance

Not surprisingly, the education expenditures reported by students attending public 4-year institutions were greater than those reported by students at public less-than-4-year institutions (table 6.5). The biggest difference was observed in the amount students paid for tuition and fees. Those in public less-than-4-year institutions paid an average of $333 per year, compared with $1,460 paid by students in public 4-year institutions. In addition, students attending 4-year institutions reported higher expenditures for housing (an average of $3,333 per year) than their counterparts in less-than-4-year institutions ($2,205)—a difference that may, in part, be due to a greater percentage of students at 4-year institutions living in campus housing, which may include room and board.

Table 6.5—Average annual expenditures reported by students at public less-than-4-year and 4-year institutions: Fall 1986

	Less-than-4-year	4-year
Tuition and fees	$333	$1,460
Books	189	322
Housing	2,205	3,333
Transportation	1,301	1,313
Other	1,556	2,572

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1986–87 National Postsecondary Student Aid Study (NPSAS:87).

Comparison of Students Enrolled in Less-than-4-Year Institutions with Students Enrolled in 4-Year Institutions: Private Not-for-Profit Sector

Demographic Characteristics

While similar proportions of males and females attended private not-for-profit 4-year institutions (49 and 51 percent, respectively), 63 percent of the students attending less-than-4-year institutions in this sector were female and 37 percent were male (table 6.6). Females were also in the majority among all racial–ethnic groups attending less-than-4-year institutions. The gender distribution among racial–ethnic groups attending 4-year institutions, on the other hand, varied: a greater proportion of Native American and black students were female, while the opposite was true for Asian students. Among Hispanic and white students, similar proportions of males and females attended 4-year institutions.

Table 6.6—Percentage of males and females at private not-for-profit less-than-4-year and 4-year institutions, by race–ethnicity: Fall 1986

	Less-than-4-year		4-year	
	Male	Female	Male	Female
Total	37	63	49	51
Race—ethnicity				
Native American	—	—	39	61
Asian	44	56	55	45
Black	33	67	37	63
Hispanic	37	63	49	51
White	34	66	49	51

— Sample too small for reliable estimate.

NOTE: Percentages may not sum to 100 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1986–87 National Postsecondary Student Aid Study (NPSAS:87).

As shown in table 6.7, private not-for-profit 4-year institutions enrolled a higher proportion of white students than did less-than-4-year institutions in this sector (84 percent compared with 77 percent). Other student attributes among those attending the two types of private not-for-profit institutions, on the other hand, were similar. For example, the majority of students enrolled at both types of institutions were under 23 years of age. Similarly, the percentage of students at each type of institution who were age 30 and over was about the same—23 percent and 21 percent. Finally, students attending private not-for-profit less-than-4-year and 4-year institutions were equally likely to be married (22 percent for each group).

Table 6.7—Percentage of students at private not-for-profit less-than-4-year and 4-year institutions, by race–ethnicity, age, and marital status: Fall 1986

	Less-than-4-year	4-year
Total	100	100
Race—ethnicity		
Native American*	8	0
Asian	3	5
Black	9	7
Hispanic	3	1
White	77	84
Age		
Under 23	60	55
23–29	17	24
30 and over	23	21
Marital Status		
Married	22	22
Single	78	78
Attendance status		
Full-time	70	78
Part-time	30	22

*The small sample of Native American students resulted in large standard errors for those attending less-than-4-year institutions (s.e. for 8 percent = 6.8)

NOTE: Percentages sum vertically and may not sum to 100 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1986–87 National Postsecondary Student Aid Study (NPSAS:87).

Income

The distribution of incomes reported by students attending private not-for-profit less-than-4-year and 4-year institutions was similar. This was true for both dependent and independent students (table 6.8). About one-third of dependent students from both groups had family incomes in the $30,000–50,000 range. Among independent students, about one-fourth of the students in both groups had incomes of less than $5,000. In the highest income range, however, a greater proportion of independent students attending less-than-4-year institutions earned $20,000 or more (35 percent) than did their counterparts attending 4-year institutions (26 percent).

Table 6.8—Percentage of students at private not-for-profit less-than-4-year and 4-year institutions, by dependent student family income and independent student income: Fall 1986

	Less-than-4-year	4-year
Total	100	100
Family income (dep.)		
Less than $12,000	18	13
$12,000–23,999	25	21
$24,000–29,999	11	12
$30,000–49,999	31	34
$50,000—74,999	14	17
$75,000 or more	2	3
Student income (ind.)		
Less than $5,000	28	24
$5,000—9,999	15	24
$10,000—14,999	12	16
$15,000—19,999	10	11
$20,000 or more	35	26

NOTE: Percentages sum vertically and may not sum to 100 percent due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1986–87 National Postsecondary Student Aid Study (NPSAS:87).

Costs of Attendance

The most apparent difference between students attending less-than-4-year and 4-year institutions in the private not-for-profit sector was related to the education expenditures they reported. The tuition and fees and housing costs at 4-year institutions were much higher than at less-than-4-year institutions (table 6.9). For example, yearly tuition and fees at 4-year institutions were more than $5,500, compared with about $2,400 for their less-than-4-year counterparts. The "other" expenditures were also significantly higher at 4-year institutions.

Table 6.9—Average annual expenditures of students at private not-for-profit less-than-4-year and 4-year institutions: Fall 1986

	Less-than-4-year	4-year
Tuition and fees	$2,440	$5,527
Books	275	402
Housing	1,443	4,340
Transportation	1,028	1,403
Other	1,448	2,975

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1986–87 National Postsecondary Student Aid Study (NPSAS:87).

Chapter 7

Summary

This report reviewed the differences, among both institutions and student populations, observed for the three types of less-than-4-year institutions—public, private not-for-profit, and private for-profit. It further compared students attending public or private not-for-profit institutions with their counterparts attending 4-year institutions.

The overwhelming majority, about 80 percent, of students enrolled in less-than-4-year institutions attended public institutions.[34] However, private for-profit institutions were more numerous than public, accounting for nearly 70 percent of less-than-4-year institutions. These institutions, however, only enrolled about 14 percent of less-than-4-year students. Private not-for-profit institutions, on the other hand, represented about 14 percent of less-than-4-year institutions, and about 4 percent of less-than-4-year enrollment.

Program offerings tended to differ for the three types of less-than-4-year institutions. Public sector institutions were equally likely to offer occupational or academic programs (86 percent and 88 percent, respectively). Furthermore, a majority of these institutions (61 percent) also offered adult/remedial programs, while 44 percent offered continuing education. Private not-for-profit institutions also tended to be both academically and occupationally oriented (66 percent and 55 percent, respectively, of these institutions offered academic or occupational programs), but few offered adult/remedial programs. Private for-profit institutions, on the other hand, primarily offered occupational programs (81 percent compared with 47 percent with academic programs), and less than one-third offered continuing education. Very few (less than 5 percent) private for-profit institutions offered adult/remedial programs.

Even when examining student populations within specific less-than-4-year institutions, few predictable patterns emerged. Overall students attending less-than-4-year institutions were more often female than male, particularly among those attending private for-profit institutions, where two-thirds of the student body was female. About 57 percent and 63 percent, respectively, of students at public and private not-for-profit less-than-4-year institutions were female. The proportion of females attending the latter two types of institutions was greater than the proportion attending 4-year institutions under the same control (public and private, not-for-profit).

The racial–ethnic group composition of students attending less-than-4-year institutions varied according to institution type. Private for-profit institutions enrolled more black and Hispanic students (21 percent and 14 percent, respectively) than either public or private not-for-private institutions. However, in comparison with their 4-year equivalents, a greater proportion of minority students, particularly Hispanics, were enrolled in both public and private not-for-profit less-than-4-year institutions.

Less-than-4-year institutions in the public sector are primarily made up of community colleges. Consequently, they tend to cater more to older, married, and part-time students than either type of institution in the private sector. The difference noted in attendance status was especially striking. A majority of students in public institutions attended school part time (65

[34]According to 1987–88 IPEDS enrollment data.

especially striking. A majority of students in public institutions attended school part time (65 percent), whereas students attending private-sector institutions were much more likely to attend school full time. Within the public sector, less-than-4-year students were also more likely to be older, married, and part time than were 4-year students. Similar differences, however, were not observed between less-than 4-year and 4-year students in the private not-for-profit sector.

Perhaps the single most distinguishing characteristic between public and private less-than-4-year institutions is the cost of attendance. Average yearly tuition and fees reported by students in public institutions amounted to less than $400, compared with more than $2,000 at private not-for-profit institutions and more than $3,000 at private for-profit institutions. However, lower income students were not more likely to attend public institutions. In fact, a greater proportion of students in the lowest income bracket (family income less than $12,000 for dependent students and student income less than $5,000 for independents) were enrolled in private for-profit institutions than in either public or private not-for-profit institutions. The percent of students receiving financial aid and the amount of aid received was substantially higher in private for-profit less-than-4-year institutions than in public and private not-for-profit institutions.

Finally, students in private for-profit less-than-4-year institutions were far more likely to aspire to a certificate as their degree objective (50 percent) than were students attending equivalent public or private not-for-profit institutions (less than 20 percent). More than one-half of the students enrolled in these latter two types of institutions aspired to continue their education at higher level institutions and to complete a baccalaureate degree or higher.

Appendix A

Technical Notes

1986–87 NPSAS Survey

The need for a nationally representative database on postsecondary student financial aid prompted the U.S. Department of Education to conduct the 1986–87 National Postsecondary Student Aid Study (NPSAS). The NPSAS sample was designed to include students enrolled at all types of postsecondary education institutions, including students enrolled at public institutions, private not-for-profit institutions, and private for-profit institutions. The sample included students at 2- and 4-year institutions, and students enrolled in occupationally specific programs that lasted for less than 2 years.

The original sample for the 1986–87 NPSAS data collection consisted of 1,353 postsecondary institutions stratified according to the highest course offering level (that is, 4-year Ph.D.-granting, 4-year non-Ph.D.-granting, 2-year, or less-than-2-year) and institutional control (that is, public, private not-for-profit, and private for-profit). The final institutional sample was reduced to 1,074 after some institutions were found to be ineligible and others refused to participate. The institutional response rate, weighted by the probability of selection and enrollment, was about 95 percent.[35]

A stratified sample of close to 60,000 students was then drawn from the October 1986 records of the institutions in the institutional sample. For each student in the sample, efforts were made to collect registration and financial aid records from the institution. All student record information collected in the fall semester was updated during the spring of 1987. This information was supplemented by mail and telephone survey information collected directly from the students during the spring of 1987. In total, the 1986–87 NPSAS record and student questionnaire file contains information on 44,176 students (35,544 undergraduates and 8,632 other). The overall response rate for students was 67 percent.

Readers should note that the 1986–87 NPSAS data file is not representative of all students enrolled during the 1986–87 academic year. Rather, the survey sample represents all postsecondary students enrolled on October 15, 1986. Thus, students who were enrolled in short-term courses that were not in session on this date and students who enrolled for the first time in the academic year in the second semester or quarter of the 1986–87 academic year were not represented.

A questionnaire was mailed to the parents or guardians of a subsample of students chosen for participation in the 1986–87 NPSAS data collection. The primary purpose of this survey was to obtain detailed information on the family and economic characteristics of dependent students who did not receive financial aid. In keeping with this purpose, parents of financially independent students who were over 25 years of age were omitted from the supplement. Questionnaires were sent to the parents or guardians of 27,415 students. Of these, 13,423 responded. Some of the parent nonresponse, however, was due to incomplete address information so that not all parents could be contacted.

---

[35]The response rate for the less-than-4-year institutional strata ranged from 73 percent for less-than-2-year public institutions to 97 percent for the private for-profit 2-year institutions. See *Methodology Report* for the *National Postsecondary Student Aid Study, 1987*, Contractor Report, March 1990.

For more information on the NPSAS survey, consult *National Postsecondary Student Aid Study Updated Record and Student Questionnaire (1987) Data File User's Manual* (Longitudinal Studies Branch, Postsecondary Education Statistics Division, Washington, DC: National Center for Education Statistics, U.S. Department of Education, March 1989) and the National Postsecondary Student Aid Study Parent Survey Supplement Data File User's Manual (Westat, Inc., Washington, DC, and contractor report prepared for the National Center for Education Statistics, U.S. Department of Education, August, 1988).

Accuracy of Estimates

The statistics in this report are derived from a sample. Two broad categories of error occur in such estimates: sampling and nonsampling errors. Sampling errors occur because observations are made only on samples of students, not on the entire population. Nonsampling errors occur not only in sample surveys, but also in complete censuses of populations.

Nonsampling errors have a number of sources: inability to obtain complete information about all students in all institutions in the sample (some students or institutions refused to participate, or students participated but answered only certain items); ambiguous definitions; differences in interpreting questions; inability or unwillingness to give correct information; mistakes in recording or coding the data; and other errors of collecting, processing, sampling, and estimating missing data.

The NPSAS sample, while representative and statistically accurate, is not a simple random sample. Students were selected from institutions grouped within strata. Sampling rates for institutions within different strata varied, resulting in better data for policy purposes, but at a cost to statistical efficiency. Hence, simple random techniques for estimation of standard errors frequently underestimate the true standard errors for some estimates. To overcome this problem, standard errors for all estimates in this tabulation were calculated using Taylor residual techniques. All estimates, standard errors, unweighted n's and weighted n's are available from the Longitudinal Studies Branch in comma-separated form for use with major spreadsheet software.

To compare estimates for separate groups, or to understand the quality of the estimates, standard errors are needed. This tabulation presents numerous estimates, each with an associated standard error. The standard errors vary in size as a function of sample size and the sample design. Hence, the standard errors for some small groups (such as Native Americans) may be so large that the estimates should not be used. However, for key statistics based upon the total group or large subgroups, the standard errors are reasonable. Standard errors are found in appendix B for a selected group of variables.

Statistical Procedures

The descriptive comparisons in this report were based on *Student's t* test statistics. Comparisons based upon the estimates of the proportions includes the estimates of the probability of a Type I error, or significance level. The significance levels were determined by calculating the *Student's t* values for the differences between each pair of means or proportions and comparing these to tables of significance levels for two-tailed hypothesis testing.

Student's t values may be computed for comparisons using the following formula:

$$t = P_1 - P_2 / \text{SQRT} (se_1^2 + se_2^2)$$

where P_1 and P_2 are the independent estimates to be compared and se_1 and se_2 are their corresponding standard errors.

There are hazards in reporting statistical tests for each comparison. First, the test may make comparisons based on large *t* statistics appear to merit attention. This can be misleading, since the magnitude of the *t* statistic is related not only to the observed differences in means or proportions, but also to the number of students in the specific categories used for comparison. Hence, a small difference compared across a large number of students would produce a large *t* statistic.

A second hazard in reporting statistical tests for each comparison is that, when making multiple comparisons among categories of an independent variable, such as different levels of income, the probability of a Type I error for these comparisons taken as a group is larger than the probability for a single comparison. When more than one difference between groups of related characteristics are tested for statistical significance, we must apply a standard that assures a level of significance for all of those comparisons taken together.

Comparisons were made in this report and reported as significant only when $p <= .05/k$ for a particular pairwise comparison, where that comparison was one of *k* tests within a family. This guarantees both that the individual comparison would have $p <= .05$ and that when *k* comparisons were made within a family of possible tests, the significance level of the comparisons would sum to $p <= .05$.[36]

For example, in a comparison of enrollment for males and females, only one comparison is possible. In this group, $k=1$, and the comparison can be evaluated with a *Student's t* test. When students are divided into three racial-ethnic groups and all possible comparisons are made, then $k=3$ and the significance level of each test must be $p <= .05/3$ or .0167, in order to be considered statistically significant.

For more information or to obtain standard errors, contact Carl M. Schmitt, National Center for Education Statistics, Longitudinal Studies Branch, 555 New Jersey Avenue, NW, Washington, DC, 20208-5652.

This report has been prepared by MPR Associates, Inc., of Berkeley, CA, for the U.S. Department of Education, Longitudinal Studies Branch, Postsecondary Education Statistics Division, National Center for Education Statistics, Office of Educational Research and Improvement, under Contract No. RS89170001.

---

[36]The standard that $p <= .05$ for each comparison is more stringent than the criterion that the significance level of the comparisons should sum to .05. For tables showing the *t* statistic required to insure that $p <= .05/k$ for a particular family size and degrees of freedom, see Oliver Jean Dunn, "Multiple Comparisons Among Means," *Journal of the American Statistical Association*, 56: 52-64.

Appendix B

Selected Standard Errors

The following table shows the standard errors for variables shown in the figures in this report.

Figure	Characteristic	Estimate	S.E.
3.1	Sex—Female	57	1.021
3.2	Race–ethnicity—Native Americans	1	0.184
	Race–ethnicity—Asian	6	0.712
	Race–ethnicity—Black	9	0.962
	Race–ethnicity—Hispanic	9	0.705
	Race–ethnicity—White	75	1.287
3.3	Age-<23 years	40	0.973
	Age-23–29	26	0.643
	Age-30 +	34	0.865
3.4	Marital status—Single	65	0.846
4.1	Sex—Female	63	3.779
4.2	Race–ethnicity—Native Americans	8	6.794
	Race–ethnicity—Asian	3	0.719
	Race–ethnicity—Black	9	2.187
	Race–ethnicity—Hispanic	3	0.733
	Race–ethnicity—White	77	5.758
4.3	Age-<23 years	60	3.183
	Age-23–29	17	1.640
	Age-30 +	23	1.928
4.4	Marital status—Single	78	2.309
5.1	Sex—Female	67	3.170
5.2	Race–ethnicity—Native Americans	1	0.210
	Race–ethnicity—Asian	3	0.780
	Race–ethnicity—Black	21	2.941
	Race–ethnicity—Hispanic	14	1.809
	Race–ethnicity—White	61	2.737
5.3	Age-<23 years	48	1.526
	Age-23–29	26	1.582
	Age-30 +	26	1.245
5.4	Marital status—Single	73	1.496

The following table shows the standard errors for highlighted findings (pages v–vi) not shown in previous table (mean estimates in parentheses).

Characteristic	Institution control		
	Public	Private not-for-profit	Private for-profit
Percent married	0.846 (35)	2.309 (22)	1.496 (27)
Dependent student's family income			
Lt $12,000	0.971 (16)	2.132 (18)	2.485 (30)
$12,000-23,999	0.696 (22)	4.346 (25)	1.242 (26)
$24,000-29,999	0.638 (12)	1.297 (11)	1.480 (12)
$30,000-49,999	1.006 (33)	2.394 (31)	1.848 (24)
$50,000-74,999	1.010 (16)	2.465 (14)	0.896 (8)
$75,000+	0.216 (1)	0.661 (2)	0.235 (1)
Average amount of tuition and fees	$15.98 (333)	$278.95 (2,440)	$103.94 (3,193)
Percent received aid	1.086 (33)	2.950 (69)	1.422 (85)
Average amount aid	$68.28 (1,620)	$239.28 (3,170)	$69.48 (3,652)

Appendix C

Selected Undergraduate Characteristics

Table C.1—Percentage distribution of selected undergraduate characteristics

Variable	Undergraduate population
Sex	
Male	44.8
Female	55.2
Race–ethnicity	
Asian	5.1
Black	9.4
Hispanic	6.8
Native American	1.0
White	77.8
Age	
15–23 years old	60.4
24–29 years old	16.8
30 plus years	22.8
Marital status	
Single	75.8
Married	24.2
Attendance status	
Full-time	62.2
Part-time	37.8
Dependent student's family income	
Less than $11,000	12.3
$11,000–16,999	7.8
$17,000–22,999	9.9
$23,000–29,999	11.7
$30,000–49,999	32.4
$50,000 plus	25.6
Independent student's income	
No income	10.2
Less than $11,000	29.4
$12,000–16,999	12.7
$17,000–22,999	10.8
$23,000–29,999	11.4
$30,000 plus	25.5

Table C.1—Percentage distribution of selected undergraduate characteristics—continued

Variable	Undergraduate population
Residence status	
School-owned housing	19.8
Off campus not with parents	50.4
Off campus with parents	29.8
Dependence status	
Dependent	63.0
Independent	37.0
Source of financial aid	
Any aid	47.8
Federal aid	33.0
Grants	34.8
Loans	24.7

NOTE: Percentages sum vertically and may not sum to 100 percent due to rounding.

SOURCE: Susan Choy and Antoinette Gifford, *Profile of Undergraduates in American Postsecondary Institutions*, National Center for Education Statistics, NCES 90-353.

Appendix D

Weighted Totals

Table D.1—Weighted Ns for row variables (in 1000s)

Row variable	Public	Private	Private for-profit
Total	4,309,482	150,219	577,140
Student sex			
Male	1,873,985	55,960	191,038
Female	2,435,496	94,259	386,101
Student race			
Native American	50,457	12,35	46,585
Asian	238,472	3,990	19,077
Black	404,652	14,027	121,845
Hispanic	382,774	4,542	81,405
White	3,233,126	115,303	348,225
Hispanic subgroup			
Mexican	1,812	1,560	33,373
Cuban	233,538	402	602
Puerto Rican	14,711	856	9,991
Other	18,404	1,479	20,827
Student age			
LT 19	384,404	25,583	68,680
19–22	1,333,678	66,976	211,310
23–29	1,105,156	27,663	149,506
30 and over	1,486,242	29,996	147,642
Handicap status			
Yes	509,935	19,0257	4,171
No	3,799,547	131,194	502,969
Student income			
LT $5,000	447,372	13,731	104,649
$5,000–9,999	233,551	7,479	72,807
$10,000–14,999	238,994	6,000	45,630
$15,000–19,999	228,477	4,922	29,713
$20,000 or more	1,019,067	17,166	59,737

Table D.1—Weighted Ns for row variables (in 1000s)—continued

Row variable	Public	Private	Private for-profit
Dependent family income			
LT $12,000	350,493	17,776	78,083
$12,000–23,999	467,080	25,0116	9,455
$24,000–29,999	245,146	10,726	30,163
$30,000–49,999	714,025	31,386	62,117
$50,000–74,999	342,944	13,683	20,397
$75,000–99,999	16,517	2,236	2,324
$100,000 or more	LowN	LowN	LowN
Mother education level			
LT High school	863,541	33,407	150,057
High school	1,716,358	60,474	212,065
Voc. school	356,204	10,063	35,613
2 year deg.	319,291	8,414	27,469
4 year deg.	426,640	15,055	37,041
Adv. deg.	216,696	11,432	15,180
Father education level			
LT High school	887,815	31,524	146,338
High school	1,683,334	60,249	216,842
Voc school	385,652	10,315	45,416
2 year deg.	298,520	9,205	22,639
4 year deg.	404,873	17,012	37,326
Adv. deg.	234,195	10,223	17,948
Mother occupation			
Manager	261,177	9,773	28,273
Professional	1,574,525	53,256	208,795
Technical	708,325	26,725	84,420
Marketing	255,516	6,927	29,598
Services	315,948	11,870	63,884
Crafts	185,574	6,780	28,500
Manufacturing	37,957	1,186	5,353
Agriculture	24,868	795	1,879
Military	3,314	0	52
Homemaker	861,896	30,210	114,865
Other	80,376	2,692	11,516

Table D.1—Weighted Ns for row variables (in 1000s)—continued

Row variable	Public	Private	Private for-profit
Father occupation			
Manager	611,863	20,238	56,567
Professional	1,829,048	61,670	251,609
Technical	274,420	10,033	34,277
Marketing	248,156	8,758	27,650
Services	164,060	5,747	26,763
Crafts	710,996	23,995	112,094
Manufacturing	233,912	11,481	38,525
Agriculture	120,176	4,818	13,859
Military	53,800	1,182	5,114
Homemaker	0	0	0
Other	63,046	2,293	10,676
Enrollment level			
1st year	1,898,405	77,018	385,166
2nd year	1,390,211	40,672	88,233
3rd year	356,623	15,097	23,576
4th or 5th year	234,919	8,748	19,509
Enrollment status			
Full-time	1,603,192	105,288	484,276
Part-time	2,702,667	44,827	92,630
Fall employment			
Yes	1,284,879	69,392	261,799
No	3,024,602	80,827	315,340
Spring employment			
Yes	2,940,452	76,891	294,153
No	1,369,029	73,328	249,875
Vocational studies			
Yes	1,529,463	82,387	418,984
No	2,752,155	66,200	157,647

Table D.1—Weighted Ns for row variables (in 1000s)—continued

Row variable	Public	Private	Private for-profit
Field of study			
Agriculture	23,974	632	188
Business	204,440	16,706	163,289
Health	355,136	33,487	42,112
Home econ.	28,927	4,225	3,976
Trades	275,894	10,633	121,887
Engineering	350,392	10,028	79,225
Educ/pub serv	290,697	6,675	8,305
Letters/lang	2,752,155	66,200	157,647
Humanities	0	0	0
Science/math	0	0	0
Social science	0	0	0
Fine arts	0	0	0
General studies	0	0	0
Business/comp sci.	0	0	0
Degree objective			
Cert/diploma	641,635	40,890	327,592
Associate degree	1,851,918	67,938	160,956
Other degree	901,330	29,030	35,767
No degree	446,078	4,549	11,630
Undecided	377,531	5,574	31,818
Institution control			
Public	4,309,481	0	0
Private	0	150,219	0
Proprietary	0	0	577,140
Dependency status			
Dependent	2,316,207	100,820	262,542
Independent	2,173,273	49,399	314,597

ISBN 0-16-038229-7

United States
Department of Education
Washington, DC 20208-5652

Official Business
Penalty for Private Use, $300

Postage and Fees Paid
U.S. Department of Education
Permit No. G-17

FOURTH CLASS BOOK RATE

BEST COPY AVAILABLE